DISTRELEC

FLIR CHANNEL SALES PRODUCTS

PRESENTATION

FEBRUARY 2022

FLIR Channel Sales Products

DISTRELEC

TELEDYNE FLIR

-  Spot Thermal Cameras
-  FLIR ONE
-  Cx Series
-  Ex Series
-  Exx Series
-  Electronic Test Bench
-  Infrared Windows
-  FLIR Txxx
-  Stand alone Software
-  Clamp Meters
-  Digital Multimeters
-  Environmental Meter
-  Insolation Testers
-  Moisture Meters
-  Spot infrared Thermometers
-  Monitoring Solutions
-  Voltage, Continuity & Current Testers
- Voltage Testers
-  Videoscopes
-  Acoustic Imaging Cameras
-  FLIR T10xx

Spot Thermal Cameras

TG297
Industrial High Temp Thermal Camera

301-60-864

TG165-X
MSX® Thermal Camera

301-79-253

TG267
Thermal Camera

301-60-863

TG275
Thermal Camera for Automotive Diagnostics

302-31-102

TG297

Industrial High Temp Thermal Camera

The FLIR TG297 is a one-of-a-kind industrial diagnostic tool that combines accurate temperature measurement with the ability to image up to 1030°C (1886°F). Patented FLIR MSX® (Multi-Spectral Dynamic Imaging) enhancement improves image clarity by embossing visual scene details on full thermal images. The TG297 is ideal for high-temperature industrial uses such as measuring the heat of glass furnaces, kilns, and forges as well as manufacturing applications, allowing you to accurately target potential faults, troubleshoot repairs, and monitor processes. Record images to assure your team that machinery and systems are functioning safely and at peak efficiency.

TG297

Industrial High Temp Thermal Camera

IDENTIFY PROBLEMS QUICKLY

Outfit your toolbox with this combination non-contact temperature measurement and thermal imaging camera

- Experience the difference you can make with a true 160 × 120 IR pixel imager (19,200 pixels)
- High-temperature filter allows camera to measure and image temperatures up to 1030°C (1886°F)
- Work from a safe distance while scanning high- temperature objects thanks to the 30:1 spot ratio
- Identify the exact area that you're measuring using the bullseye laser pointer

PRODUCE CRISP THERMAL IMAGES

See the detail needed to troubleshoot faults and gauge their severity

- Diagnose problems faster with FLIR-patented MSX image enhancement
- Display and capture thermal or visual images with temperature readings
- Compare before-and-after stored images to demonstrate the problem and the repair
- View thermal images in your preferred color palette on the bright 2.4-inch color display

WORK WITH CONFIDENCE IN RUGGED ENVIRONMENTS

Take the TG297 anywhere thanks to its portable design and protective IP54 enclosure

- Work safely and worry-free knowing that the thermal imager can withstand a 2-meter drop
- Peer into the darkness and hard-to-reach areas with the bright LED flashlight
- Find this compact, durable imager in a crowded tool bag easily, thanks to the ergonomic
- handle design
- Rely on the security of the world-class FLIR 2-10 warranty

TG297

Industrial High Temp Thermal Camera

Imaging and optical data	
IR resolution	160 × 120 pixels
Digital image enhancement	Yes
Thermal sensitivity/NETD	<70 mK
Field of view (FOV)	57° × 44°
Minimum focus distance	0.3 m (0.98 ft)
Distance to spot ratio	30:1
Image frequency	8.7 Hz
Focus	Fixed
Focal plane array/spectral range	Uncooled microbolometer/7.5–14 µm
Detector pitch	12 µm
Image presentation	
Display resolution	320 × 240 pixels
Screen size	2.4 in. portrait
Color palettes	Iron , Rainbow, White hot, Black hot, Arctic, Lava
Image adjustment	Automatic
Image modes	MSX® (Multi Spectral Dynamic Imaging) Visual with temperature reading
Gallery	Yes
Measurement and analysis	
Object temperature range	-25°C to 1030°C (-13°F to 1886°F)
Measurement accuracy	-25°C to 50°C (-13°F to 122°F): up to ±3°C (±7°F) 50 to 100°C (122 to 212°F): ±1.5°C (±3°F) or ±1.5%, whichever is greater 100°C to 500°C (212°F to 932°F): ±2.5°C (±6°F) or ± 2.5% whichever is greater 500°C to 1030°C (932°F to 1886°F): ±3°C (±7°F) or ± 3%, whichever is greater
IR temperature resolution	0.1°C (0.2°F)
Repeatability of reading	±1% of reading or ±1°C (2°F), whichever is greater
Response time	150 ms
IR thermometer measurement	Continuous scanning
Minimum measurement distance	0.26 m (0.85 ft)
Spotmeter	Center spot on/off

Set-up and service functions	
Set-up commands	Local adaptation of units, language, date, and time formats Screen brightness (high, medium, low) Gallery, deletion of images
Emissivity correction	Yes: 4 pre-set levels with custom adjustment of 0.1–0.99
Image storage and visual camera	
Storage capacity on 4 GB card	50,000 images
Image file format	JPEG w/ spot temp data
Digital camera resolution	2 MP (1600 × 1200 pixels)
Field of view (FOV)	71° × 56°, adapts to IR lens
Light and laser	
Flashlight	100 lumens LED, on/off option
Class 1 laser	Projects center spot and outlines circular measurement area to indicate size
Data communcation interfaces	
Bluetooth®	BLE
USB	Type-C: data transfer, power
Additional data	
Battery type	Rechargeable 3.7 V Li-ion battery
Battery operating time	5 hrs scanning
Battery charging time	4 hrs to 90%
Power management	Adjustable: off, 5 min, 15 min, 30 min
Shock/vibration	25 g (IEC 60068-2-27); 2 g (IEC 60068-2-6)
Drop	Designed for 2 m (6.56 ft)
Weight	0.394 kg (13.9 oz)
Size (L × W × H)	210 × 64 × 81 mm (8.3 × 2.5 × 3.2 in)
Package contents	

TG165-X

MSX® Thermal Camera

The FLIR TG165-X dramatically reduces inspection and diagnostic time by helping you visually pinpoint the source of electrical, mechanical, and HVAC/R system faults. Instead of searching for temperature anomalies with a single-spot IR thermometer, this non-contact temperature measurement and imaging tool displays a thermal picture of your target including any hot spots or cold zones that could indicate a problem. See wires or components clearly and even read labels thanks to FLIR patented MSX image enhancement, which adds visual details to full thermal images. The bullseye laser helps ensure you're always targeting the right component for measurement while the drop-tested, portable design with easy-to-use buttons and settings help you complete the job quickly and stress-free. With internal storage for up to 50,000 images and rechargeable Li-ion battery, the FLIR TG165-X is ready to go right out of the box

TG165-X

MSX® Thermal Camera

PINPOINT THE SOURCE OF SYSTEM FAILURES

Troubleshoot electrical, mechanical, and building issues with this handheld thermal imager

- See temperature anomalies immediately in the thermal image instead of searching for them with a single-spot IR thermometer
- Speed inspections with a thermal view that tells you instantly whether a target has overheating components or hidden air leaks
- Measure a wide range of temperatures, from
- -25°C to 300°C (-13°F to 572°F), with an accuracy of up to ±1.5°C (±3°F)

COMPLETE INSPECTIONS QUICKLY & EASILY

See the detail needed to troubleshoot faults and gauge their severity

- Interpret images faster and easier with MSX® two-camera technology, which enhances thermal images with crisp visual details
- Identify the exact area that you're measuring using the bullseye laser pointer
- Capture thermal MSX or visual images plus temperature readings with a simple trigger-pull
- Demonstrate the problem was found and corrected with recorded before-and-after images

WORK WITH CONFIDENCE

Take the TG165-X anywhere thanks to its portable design and protective IP54 enclosure

- Work safely and worry-free knowing that the thermal imager can withstand a 2-meter drop
- See into dark or hard-to-reach areas with the bright LED worklight
- Easily view live thermal or recorded images on 2.4-in. display
- Rely on the security of the world-class FLIR 2-10 warranty

TG165-X

MSX® Thermal Camera

Imaging and optical data	
IR resolution	80 × 60 pixels
Digital image enhancement	No
Thermal sensitivity/NETD	<70 mK
Field of view (FOV)	51° × 66°
Minimum focus distance	0.3 m (0.98 ft)
Distance to spot ratio	24:1
Pseudo dual range	No
Image frequency	8.7 Hz
Focus	Fixed
Detector data	
Focal plane array/spectral range	Uncooled microbolometer/7.5–14 µm
Detector pitch	17 µm
Image presentation	
Display resolution	320 × 240 pixels
Screen	2.4 in. portrait, 80° viewing angle
Image adjustment	Automatic
Image modes	• MSX® (Multi Spectral Dynamic Imaging) • Visual (with temperature reading)
Gallery	Yes
Measurement and analysis	
Object temperature range	-25°C to 300°C (-13°F to 572°F)
Accuracy	• 50°C to 100°C (122°F to 212°F) - acc. of ±1.5°C (±3°F) • 0°C to 50°C/100°C to 300°C (32°F to 122°F/212°F to 572°F) - acc. of ±2.5°C (±5°F) • -25°C to 0°C (-13°F to 32°F) - acc. of ±3°C (±7°F)
Minimum measurement distance	0.26 m (0.85 ft.)
Spotmeter	Center spot on/off
Color palettes	Iron, Rainbow, Whitehot, Blackhot, Arctic, Lava
Set-up	
Set-up commands	• Local adaptation of units, language, date, and time formats • Screen brightness (high, medium, low) • Gallery, deletion of images
Emissivity correction	Yes: 4 pre-set levels with custom adjustment of 0.1–0.99

Storage of images	
Storage media	4 GB
Image storage capacity	50,000 images
Image file format	JPEG with spot temp in meta tag
Digital camera	
Resolution	2 MP (1600 × 1200 pixels)
Focus	Fixed
Field of view	71° × 56°, adapts to the IR lens
Worklight and Laser	
Worklight	LED on/off
Light output	100 lumens
Bullseye laser pointer	Indicating the size of the measurement area
Laser type	Class 1
Data communication interfaces	
Interfaces	USB 2.0
USB standard	USB Type-C High Speed; data transfer/power
Power system	
Battery type	Rechargeable Li-ion, 3.7 V battery
Battery operating time	5 hours of scanning (LCM medium brightness) 4.5 hours with laser on (LCM medium brightness)
Battery charge life	30 days minimum
Charging system	Battery is charged inside the camera; 4 hrs to 90%, 6 hrs. to 100%
Power management	Adjustable: off, 5 minutes, 15 minutes, 30 minutes
General	
Operating temperature range	-10°C to 45°C (14°F to 113°F)
Encapsulation	IP54 (IEC60529)
Shock	25 g (IEC 60068-2-27)
Vibration	2 g (IEC 60068-2-6)
Drop test	Designed for 2 m (6.56 ft.)
Safety	CE/CB/EN61010/UL
Weight	0.394 kg (13.9 oz)
Size (L × W × H)	210 × 64 × 81 mm (8.3 × 2.5 × 3.2 in)
Tripod mounting	UNC ¼"-20
Country of origin	Taiwan

TG267™

Thermal Camera

The FLIR TG267 takes you beyond the limitations of single-spot IR thermometers, allowing you to see the hot and cold spots that can indicate serious issues. Examine everything from electrical connections to mechanical breakdowns quickly and accurately. This handheld thermal camera reduces diagnostic time while simplifying reporting and long-term monitoring of equipment and systems throughout a facility. FLIR MSX® (Multi-Spectral Dynamic Imaging) improves image clarity by embossing visual scene details on thermal images, providing added context to help you accurately target potential faults and troubleshoot repairs. Record images to monitor maintenance history and reassure your customer that problems have been resolved. With a simple user interface, Bluetooth® connectivity, storage for up to 50,000 images, and rechargeable Li-ion battery, FLIR TG267 is ready to go out of the box.

TG267™

Thermal Camera

IDENTIFY PROBLEMS QUICKLY

Outfit your toolbox with this combination non-contact temperature measurement and thermal imaging camera

- Experience the difference you can make with a true 160 × 120 IR pixel imager (19,200 pixels)
- Measure a wide range of temperatures: -25°C to 380°C (-13°F to 716°F)
- Add contact-measurement readings with the included Type-K thermocouple (up to
- 260°C/500°F)
- Identify the exact area that you're measuring using the bullseye laser pointer

PRODUCE CRISP THERMAL IMAGES

See the detail needed to troubleshoot faults and gauge their severity

- Diagnose problems faster with FLIR-patented MSX image enhancement
- Display and capture thermal or visual images with temperature readings
- Compare before-and-after stored images with FLIR Tools® software to demonstrate the problem and your fix
- View thermal images in your preferred color palette on the bright 2.4-inch color display

WORK WITH CONFIDENCE IN RUGGED ENVIRONMENTS

Take the TG267 anywhere thanks to its portable design and protective IP54 enclosure

- Work safely and worry-free knowing that the thermal imager can withstand a 2-meter drop
- Peer into the darkness and hard-to-reach areas with the bright LED flashlight
- Upload measurement and images in the field via a METERLiNK® connection to the FLIR Tools mobile app
- Rely on the security of the world-class FLIR 2-10 warranty

TG267™

Thermal Camera

Imaging and optical data	
IR resolution	160 × 120 pixels
Digital image enhancement	Yes
Thermal sensitivity/NETD	<70 mK
Field of view (FOV)	57° × 44°
Minimum focus distance	0.3 m (0.98 ft)
Distance to spot ratio	24:1
Image frequency	8.7 Hz
Focus	Fixed
Focal plane array/spectral range	Uncooled microbolometer/7.5–14 µm
Detector pitch	12 µm
Image presentation	
Display resolution	320 × 240 pixels
Screen size	2.4 in. portrait
Color palettes	Iron , Rainbow, White hot, Black hot, Arctic, Lava
Image adjustment	Automatic
Image modes	MSX® (Multi Spectral Dynamic Imaging) Visual with temperature reading
Gallery	Yes
Measurement and analysis	
Object temperature range	-25°C to 380°C (-13°F to 716°F)
Measurement accuracy	-25°C to 50°C (-13°F to 122°F): up to ±3°C (±7°F) 50 to 100°C (122 to 212°F): ±1.5°C (±3°F) or ± 1.5% whichever is greater 100°C to 380°C (212°F to 716°F): ±2.5°C (±6°F) or ± 2.5% whichever is greater
IR temperature resolution	0.1°C (0.2°F)
Repeatability of reading	±1% of reading or ±1°C (2°F), whichever is greater
Response time	150 ms
IR thermometer measurement	Continuous scanning
Minimum measurement distance	0.26 m (0.85 ft)
Type-K range	Included Type-K probe: up to 260°C (500°F)
Type-K accuracy	± (1.0% + 3°C (7°F))
Spotmeter	Center spot on/off

Set-up and service functions	
Set-up commands	Local adaptation of units, language, date, and time formats Screen brightness (high, medium, low) Gallery, deletion of images
Emissivity correction	Yes: 4 preset levels with custom adjustment of 0.1–0.99
Image storage and visual camera	
Storage capacity on 4 GB card	50,000 images
Image file format	JPEG w/ spot temp data
Digital camera resolution	2 MP (1600 × 1200 pixels)
Field of view (FOV)	71° × 56°, adapts to IR lens
Light and laser	
Flashlight	100 lumens LED, on/off option
Class 1 laser	Projects center spot and outlines circular measurement area to indicate size
Data communcation interfaces	
Bluetooth®	BLE
USB	Type-C: data transfer, power
Additional data	
Battery type	Rechargeable 3.7 V Li-ion battery
Battery operating time	5 hrs scanning
Battery charging time	4 hrs to 90%
Power management	Adjustable: off, 5 min, 15 min, 30 min
Shock/vibration	25 g (IEC 60068-2-27); 2 g (IEC 60068-2-6)
Drop	Designed for 2 m (6.56 ft)
Weight	0.394 kg (13.9 oz)
Size (L × W × H)	210 × 64 × 81 mm (8.3 × 2.5 × 3.2 in)
Package contents	

TG275™

Thermal Camera for Automotive Diagnostics

The TG275 is the first FLIR camera specifically designed for the automotive maintenance and repair professional. Featuring IGM™ (Infrared Guided Measurement), this diagnostic tool combines non-contact temperature measurement and thermal imaging to help you quickly find the source of heat- related problems and spot potential faults early. Use the TG275 to record before and after images of repairs so you can reassure customers that the problem has been found and fixed. Affordable and easy to use, the TG275 is ideal for troubleshooting issues related to batteries, relays and switches, exhaust manifolds, AC condensers, drive train components, and much more.

TG275™

Thermal Camera for Automotive Diagnostics

IDENTIFY PROBLEMS QUICKLY

This two-in-one temperature measurement and thermal imaging tool helps you troubleshoot failed systems fast

- See beyond the limitations of single-spot IR thermometers with this 160 × 120 (19,200 pixels) thermal imager
- Measure a wide range of temperatures, from -25°C to 550°C (-13°F to 1022°F)
- Ensure you're measuring the right component by targeting the area with a high-precision, energy-efficient laser

SUPERIOR IMAGE QUALITY AT AN AFFORDABLE PRICE

See the vehicle in a whole new way thanks to vibrant display and image enhancement features

- FLIR patented MSX® enhancement adds sharp visual detail to thermal images, making it easier to diagnose problems
- Bright 2.4-inch screen clearly displays thermal images in your preferred color palette
- Image recording feature helps to demonstrate that you correctly identified the source of the problem and made the appropriate repairs

STANDS UP TO TOUGH WORK ENVIRONMENTS

The TG275 is rugged and reliable enough for use in auto shops, outside, or anywhere

- Work safely while still measuring accurately thanks to the camera's 30:1 spot size ratio
- Rugged design with an IP54 enclosure that protects the camera from dirt, dust, and oil
- See into dark, difficult-to-reach areas with the help of the bright LED flashlight

TG275™

Thermal Camera for Automotive Diagnostics

Image and Optical Data	
IR resolution	160 × 120 (19,200 pixels)
Thermal sensitivity/NETD	<70 mK
Field of View (FOV)	57° × 44°
Distance-to-spot ratio	30:1
Minimum focus distance	0.3 m (0.98 ft.)
Imaging range	–25°C to 550°C (–13°F to 1022°F)
Image frequency	8.7 Hz
Focus	Fixed
Digital camera	2 MP, 71° × 56° FOV
Image Presentation and Modes	
Display resolution	320 × 240 pixels
Screen size	2.4 in color LCD, portrait orientation
Aspect ratio	4:3
Image adjustment	Automatic
Visual image	Yes
MSX®	Yes
Gallery	Yes
Color palettes	Iron, Rainbow, White hot, Black hot, Arctic, Lava
Image storage capacity	4 GB for storage of up to 50,000 pictures
Image file format	JPEG
Measurement and Analysis	
Camera temperature range	–25°C to 550°C (–13°F to 1022°F)
Measurement accuracy	±1.5°C (2.7°F) for temperatures 50°C to 100°C (122°F to 212°F) Up to ±3°C (±5.4°F) for temperatures -25°C to 50°C (-13°F to 122°F) Up to ±3°C (±5.4°F) for temperatures 100°C to 550°C (212°F to 1022°F)
IR temperature resolution	0.1°C (0.2°F)
IR thermometer measurement	Continuous scanning
Spotmeter	Center spot on/off
Emissivity correction	Yes: 4 preset levels with custom adjustment of 0.1 to 0.99
Set-up commands	Local adaptation of units, language, date, and time formats Screen brightness (high, medium, low) Gallery, deletion of images
General	

Laser pointer	Center spot and circular area
Laser	Class 1
Interfaces	USB 2.0, Bluetooth® BLE
USB	USB Type-C: data transfer/power
Available languages	Czech, Danish, Dutch, English, Finnish, French, German, Greek, Hungarian, Italian, Japanese, Korean, Norwgian, Polish, Portuguese, Russian, simplified Chinese, Spanish, Swedish, traditional Chinese, Turkish
Flashlight	Bright LED flashlight
Battery operating time	5 hours continuous scanning
Battery type	Rechargeable Li-ion battery
Battery voltage	3.7 V
Battery charging time	4 hours to 90%, 6 hours to 100%
Power management	Adjustable: off, 5 min, 15 min, 30 min
IP rating	IP54 (IEC60529)
Drop	Designed for 2 m (6.56 ft)
Safety	CE/CB/EN61010/UL
Operating temperature range	–10°C to 45°C (14°F to 113°F)
Tripod mounting	UNC 1/4”-20
Weight (including battery)	0.394 kg (13.9 oz)
Size (L x W x H)	210 mm × 64 mm × 81 mm (8.3 in × 2.5 in × 3.2 in)
Box contents	Thermal camera, wrist strap lanyard, USB cable, pouch, printed documentation

FLIR ONE

FLIR One PRO

FLIR ONE Pro – iOS

300-92-156

FLIR One PRO

FLIR ONE Pro – Android (USB-C)

300-92-155

FLIR One PRO LT

FLIR ONE Pro LT – iOS

301-16-906

FLIR One PRO LT

FLIR ONE Pro LT – Android (USB-C)

301-16-904

FLIR One PRO

FLIR ONE Pro – iOS / Android (USB-C)

The FLIR ONE Pro helps you find invisible problems faster than ever, whether you're inspecting electrical panels, troubleshooting mechanical systems, looking for HVAC problems, or finding water damage. This FLIR ONE Pro-Series camera offers 4x the native resolution of the FLIR ONE Pro LT, for sharper image clarity that's further enhanced by the revolutionary FLIR VividIR™. Measure temperatures more than 3x higher than any FLIR ONE model up to 400°C with a sensitivity that detects temperature differences down to 70 mK. Packed with powerful measurement tools, the FLIR ONE Pro will work as hard as you do.

FLIR One PRO

FLIR ONE Pro – iOS / Android (USB-C)

IMAGE DETAIL & CLARITY

- With its 19,200 pixel resolution a 4x improvement over the FLIR ONE Pro LT and VividIR™, FLIR ONE Pro gives you the ability to see more detail when it matters most.

EXPANDED MEASUREMENT

- Measure temperatures between up to 400°C compared with a maximum of 120°C (248°F) for the FLIR ONE Pro LT with up to three spot temperature meters and six temperature regions of interest

JOBSITE TOUGH

- Built to take the abuse that working on a jobsite dishes out every day, FLIR One Pro is rated to take a drop from 1.8 meters and is built to last.

FLIR One PRO

Specifications

Specifications by product

	FLIR ONE Pro LT	FLIR ONE Pro
Thermal pixel size	17 µm	12 µm
Thermal resolution	4,800 pixels (80 × 60)	19,200 pixels (160 × 120)
Thermal sensitivity	100 mK	70 mK
Object temperature range(s)	-20°C to 120°C (-4°F to 248°F)	-20° to 120°C (-4°F to 248°F) 0°C to 400°C (32°F to 752°F)
HFOV/VFOV	50° / 38°	55° / 43°

Common specifications

Size (w × h × d)	68 × 34 × 14 mm (2.7 × 1.3 × 0.6 in)
Measurement accuracy	±3°C (5.4°F) or ±5%, typical percent of the difference between ambient and scene temperature. Applicable 60 sec after start-up when the unit is within 15°C to 35°C (59°F to 95°F) and the scene is within 5°C to 120°C (41°F to 248°F)
Spectral range	8 – 14 µm
Visual resolution	1440 × 1080
Frame rate	8.7 Hz
Focus	Fixed: 15 cm – infinity
Adjustable MSX distance	0.3 m – infinity
Image presentation modes	Infrared, visual, MSX
VividIR	Yes
Palettes	Gray (white hot), Hottest, Coldest, Iron, Contrast, Arctic, Lava, and Color Wheel
Video and image capture	Video and photo, saved as 1440 × 1080
File formats	Radiometric JPG, MPEG-4 (file format MOV for iOS, MP4 for Android)
Spot measurement	Hottest, Coldest, and 3 spot measurement
Drop tested	Drop from 1.8 m (5.9 ft)

ACCESSORIES

- Software
  - FLIR Thermal Studio Suit

FLIR One PRO LT

FLIR ONE Pro LT – iOS / Android (USB-C)

FLIR ONE Pro LT has the power to find hidden problems faster than ever. With the enhanced resolution of FLIR VividIR™, added perspective of FLIR MSX®, and the convenience of the OneFit™ adjustable connector, FLIR ONE Pro LT works as hard as you do. Whether you're a professional or just focused on DIY projects, the FLIR ONE Pro LT has the powerful features you need at an affordable price.

FLIR One PRO LT

FLIR ONE Pro LT – iOS / Android (USB-C)

VIVIDIR™ IMAGE PROCESSING

- Unique image-enhancement technology that sharpens thermals to help you catch potential problems early and reliably diagnose problems

FLIR ONEFIT™ CONNECTOR

- Adjustable connector extends by up to 4 mm, so you can secure your FLIR ONE Pro LT to your mobile device while its still in the protective case.

HARD-WORKING APP

- Work-based features such as multiple spot meters, level/span controls, and reporting through the FLIR Tools Mobile App support more professional problem solving and functionality.

FLIR One PRO

Specifications

Specifications by product

	FLIR ONE Pro LT	FLIR ONE Pro
Thermal pixel size	17 µm	12 µm
Thermal resolution	4,800 pixels (80 × 60)	19,200 pixels (160 × 120)
Thermal sensitivity	100 mK	70 mK
Object temperature range(s)	-20°C to 120°C (-4°F to 248°F)	-20° to 120°C (-4°F to 248°F) 0°C to 400°C (32°F to 752°F)
HFOV/VFOV	50° / 38°	55° / 43°

Common specifications

Size (w × h × d)	68 × 34 × 14 mm (2.7 × 1.3 × 0.6 in)
Measurement accuracy	±3°C (5.4°F) or ±5%, typical percent of the difference between ambient and scene temperature. Applicable 60 sec after start-up when the unit is within 15°C to 35°C (59°F to 95°F) and the scene is within 5°C to 120°C (41°F to 248°F)
Spectral range	8 – 14 µm
Visual resolution	1440 × 1080
Frame rate	8.7 Hz
Focus	Fixed: 15 cm – infinity
Adjustable MSX distance	0.3 m – infinity
Image presentation modes	Infrared, visual, MSX
VividIR	Yes
Palettes	Gray (white hot), Hottest, Coldest, Iron, Contrast, Arctic, Lava, and Color Wheel
Video and image capture	Video and photo, saved as 1440 × 1080
File formats	Radiometric JPG, MPEG-4 (file format MOV for iOS, MP4 for Android)
Spot measurement	Hottest, Coldest, and 3 spot measurement
Drop tested	Drop from 1.8 m (5.9 ft)

ACCESSORIES

- Software
  - FLIR Thermal Studio Suit

FLIR CX

C3-x

Thermal Camera

301-86-629

FLIR C5

Compact Thermal Camera

301-79-252

FLIR C3-X

Compact Thermal Camera

The FLIR C3-X makes it easier than ever to inspect for hidden problems, document repairs, and share evidence with customers. Featuring a 128 × 96 pixel thermal sensor, MSX® (Multi-Spectral Dynamic Imaging), a 5-megapixel visual camera, and LED flashlight, the C3-X is an affordable inspection tool for electrical/mechanical, building, and maintenance applications. Directly upload and store images to the FLIR Ignite™ cloud, where you can organize and back up files. Instantly share images with customers or create professional reports from a mobile device or computer..

FLIR C3-X

Compact Thermal Camera

IDENTIFY AND TROUBLESHOOT

- Quickly find hidden faults and reduce diagnostic time with MSX and 128 × 96 true thermal imaging

DOCUMENT AND SHARE

- Directly upload images using FLIR Ignite cloud connectivity, then create professional reports and email them to customers

RUGGED, RELIABLE, COMPACT

- Take the pocket-portable C3-X with you to every job - it's IP54 rated for protection against water and dust and designed to withstand a 2 m drop

FLIR C3-X

Compact Thermal Camera

SPECIFICATIONS

FLIR Cx-Series	C3-X	C5
IR sensor	128 × 96 (12,288 pixels)	160 × 120 (19,200 pixels)
Object temperature range	-20 to 300°C (-4 to 572°F)	-20 to 400°C (-4 to 752°F)
Zoom	No	Yes
Image adjustments	Automatic level and span, Manual level and span	Automatic level and span, Manual level and span, 1-Touch Level/Span
Streaming	No	USB Video Class colorized uncompressed with overlay
Notes (text)	Soft keyboard on touchscreen	Soft keyboard on touchscreen Auto-prompt for note when image is saved
Field of view (FOV)	54° × 42°	
Thermal sensitivity/NETD	<70 mK	
Image frequency	8.7 Hz	
Focus	Focus free	
Spectral range	8 to 14 µm	
Screen size	3.5 in	
Visual camera	5 MP	
Display resolution	640 × 480	
Image modes	Infrared image, Visual image, MSX (Embossed visual details on thermal image), Picture-in-picture (IR area on visual image)	
FLIR Ignite™ cloud connectivity	Yes	
Data communication interface	Wi-Fi, Bluetooth® PAN, USB-C	
Battery operating time	4 hours	

FLIR C5

Compact Thermal Camera

With the FLIR C5 in your pocket you'll be ready anytime to find hot fuses, air leaks, plumbing issues, and more. Identifying hidden problems is easy with the 160 x 120 (19,200 pixels) true thermal imager, MSX® (Multi-Spectral Dynamic Imaging), 5-megapixel visual camera, and LED flashlight. The C5 directly uploads and stores your images to the FLIR Ignite™ cloud, where you can organize and back up files. Then instantly share images with customers or create professional reports that document the problem and required repairs.

FLIR C5

Compact Thermal Camera

FIND AND TROUBLESHOOT

- Quickly find hidden faults and reduce diagnostic time thanks to MSX, 160 x 120 true thermal imaging, and 1-Touch Level Span

DOCUMENT AND SHARE

- Directly upload images using FLIR Ignite cloud connectivity, then create professional reports and email them to customers

RUGGED, RELIABLE, COMPACT

- Take the pocket-portable C5 with you to every job - it's IP54 rated for protection against water and dust and designed to withstand a 2 m drop

FLIR C5

Compact Thermal Camera

SPECIFICATIONS

FLIR Cx-Series	C3-X	C5
IR sensor	128 × 96 (12,288 pixels)	160 × 120 (19,200 pixels)
Object temperature range	-20 to 300°C (-4 to 572°F)	-20 to 400°C (-4 to 752°F)
Zoom	No	Yes
Image adjustments	Automatic level and span, Manual level and span	Automatic level and span, Manual level and span, 1-Touch Level/Span
Streaming	No	USB Video Class colorized uncompressed with overlay
Notes (text)	Soft keyboard on touchscreen	Soft keyboard on touchscreen Auto-prompt for note when image is saved
Field of view (FOV)	54° × 42°	
Thermal sensitivity/NETD	<70 mK	
Image frequency	8.7 Hz	
Focus	Focus free	
Spectral range	8 to 14 µm	
Screen size	3.5 in	
Visual camera	5 MP	
Display resolution	640 × 480	
Image modes	Infrared image, Visual image, MSX (Embossed visual details on thermal image), Picture-in-picture (IR area on visual image)	
FLIR Ignite™ cloud connectivity	Yes	
Data communication interface	Wi-Fi, Bluetooth® PAN, USB-C	
Battery operating time	4 hours	

FLIR EX

FLIR E4 Wi-Fi

Infrared Camera with MSX® & Wi-Fi

110-64-642

FLIR E5-XT

Infrared Camera with Extended Temperature Range

301-35-119

FLIR E6-XT

Infrared Camera with Extended Temperature Range

301-35-120

FLIR E8-XT

Infrared Camera with Extended Temperature Range

301-35-121

Accessories

FLIR E4 Wi-Fi

Infrared Camera with MSX® & Wi-Fi

The FLIR E4 with Wi-Fi is an easy-to-use thermal imaging camera for electrical, mechanical, building, and HVAC/R applications. Find hidden problems, take accurate temperature readings, and confirm repairs easily, thanks to the 4,800 (80 x 60) pixel infrared resolution and MSX image enhancements. Then, streamline your work using the built-in Wi-Fi, for uploading and sharing images and data through the FLIR Tools mobile app.

FLIR E4 Wi-Fi

Infrared Camera with MSX® & Wi-Fi

WI-FI CONNECTIVITY

- Upload images and data to the FLIR Tools app over Wi-Fi, for instant sharing and reporting.

CRISP RESOLUTION

- The E4 has a crisp, 4,800 pixel detector that is just the right size for your application as well as your budget.

THE POWER OF ONE BUTTON

- A focus-free lens and simple button navigation to on-screen settings makes this camera easy to operate.

FLIR E4 Wi-Fi

Infrared Camera with MSX® & Wi-Fi

Image and optical data	E4	E5-XT	E6-XT	E8-XT
IR resolution	80 × 60 (4,800 pixels)	160 × 120 (19,200 pixels)	240 × 180 (43,200 pixels)	320 × 240 (76,800 pixels)
Thermal sensitivity/NETD	<0.15°C (0.27°F) / <150 mK	<0.10°C (0.27°F) / <100 mK	<0.06°C (0.11°F) / <60 mK	<0.05°C (0.09°F) / <50 mK
Spatial resolution (IFOV)	10.3 mrad	5.2 mrad	3.4 mrad	2.6 mrad
Field of view (FOV)	45° × 34°			
F-number	1.5			
Image frequency	9 Hz			
Focus	Focus-free			
Detector data				
Detector type	Focal Plane Array (FPA), uncooled microbolometer			
Spectral range	7.5–13 µm			
Image presentation and modes				
Display	3" 320 × 240 color LCD			
Image adjustment	Automatic adjust/lock image			
Image modes	Thermal MSX, thermal, picture-in-picture, thermal blending, digital camera			
Color palettes	Iron, Rainbow, Black & White			
Measurement and analysis				
Object temperature range	–20°C to 250°C (–4°F to 482°F)	-20°C to 400°C (-4°F to 752°F) in two ranges	-20°C to 550°C (-4°F to 1022°F) in two ranges	-20°C to 550°C (-4°F to 1022°F) in two ranges
Accuracy	±2°C (±3.6°F) or ±2% of reading for ambient temperature 10°C to 35°C (50°F to 95°F) and object temperature above 0°C (32°F)			
Spotmeter	Center spot			
Area	Box with max/min			
Isotherm	Above alarm, below alarm			
Data communication and interfaces				
Interfaces	USB Micro: data transfer to and from PC and Mac device			
Wi-Fi	Peer-to-peer or infrastructure			
File format	Standard JPEG, 14-bit measurement data included			
General				
Operating temperature range	-15°C to 50°C (5°F to 122°F)			
Battery	Rechargeable 3.6 V Li ion battery			
Battery operating time	Approx. 4 hours at 25°C (77°F) ambient temperature and typical use			
Battery charging time	2.5 hours to 90% capacity in camera. 2 hours in charger			
Drop	2 m (6.6 ft.)			
Camera weight, incl. battery	0.575 kg (1.27 lb.)			
Camera size (L × W × H)	244 × 95 × 140 mm (9.6 × 3.7 × 5.5 in)			
Box contents	Infrared camera, hard transport case, battery, USB cable, power supply/charger with EU, UK, US and Australian plugs, printed documentation			

ACCESSORIES

- CASES AND POUCHES
  - Pouch for FLIR E-Series (T911689ACC)
  - Pouch with Shoulder Strap (T198529)
- BATTERIES AND POWER
  - Battery Charger (T198531)
  - Battery Li-ion 3.6 V, 2.6 Ah, 9.4 Wh (T199362ACC)
  - Car Charger (T198532)
  - Power Supply (T198534)
- CABLES AND ADAPTERS
  - USB cable, USB-A to USB Micro-B (T198533)
- STRAPS AND HOLSTERS
  - Tool Belt (T911093)
- SOFTWARE
  - FLIR Thermal Studio Suite
  - FLIR Tools App

FLIR E5-XT

Infrared Camera with Extended Temperature Range

FLIR E5-XT is the perfect tool for diagnosing electrical, mechanical, and building problems, thanks to its 19,200 (160 × 120) pixel infrared detector and expanded, -20°C to 400°C (-4°F to 752°F) temperature range. FLIR MSX® image enhancement provides extraordinary thermal imaging detail, while the built-in Wi-Fi allows users to quickly connect with the FLIR Tools® Mobile app for sharing images and sending reports easily from any location.

FLIR E5-XT

Infrared Camera with Extended Temperature Range

SIMPLE, INTUITIVE CONTROLS

- Automatic and focus-free, with clear on-screen navigation to measurement tools and settings

SHARE IMAGES AND FINDINGS EASILY

- Download standard JPEGS, create reports, and share what you've found via a Wi-Fi connection to the FLIR Tools Mobile app

BUILT FOR YOUR TOUGH WORK ENVIRONMENT

- Lightweight and well-balanced, the E5-XT has an IP54 enclosure and easily withstands a 2-meter drop test

FLIR E5-XT

Infrared Camera with Extended Temperature Range

Image and optical data	E4	E5-XT	E6-XT	E8-XT
IR resolution	80 × 60 (4,800 pixels)	160 × 120 (19,200 pixels)	240 × 180 (43,200 pixels)	320 × 240 (76,800 pixels)
Thermal sensitivity/NETD	<0.15°C (0.27°F) / <150 mK	<0.10°C (0.27°F) / <100 mK	<0.06°C (0.11°F) / <60 mK	<0.05°C (0.09°F) / <50 mK
Spatial resolution (IFOV)	10.3 mrad	5.2 mrad	3.4 mrad	2.6 mrad
Field of view (FOV)	45° × 34°			
F-number	1.5			
Image frequency	9 Hz			
Focus	Focus-free			
Detector data				
Detector type	Focal Plane Array (FPA), uncooled microbolometer			
Spectral range	7.5–13 µm			
Image presentation and modes				
Display	3" 320 × 240 color LCD			
Image adjustment	Automatic adjust/lock image			
Image modes	Thermal MSX, thermal, picture-in-picture, thermal blending, digital camera			
Color palettes	Iron, Rainbow, Black & White			
Measurement and analysis				
Object temperature range	–20°C to 250°C (–4°F to 482°F)	-20°C to 400°C (-4°F to 752°F) in two ranges	-20°C to 550°C (-4°F to 1022°F) in two ranges	-20°C to 550°C (-4°F to 1022°F) in two ranges
Accuracy	±2°C (±3.6°F) or ±2% of reading for ambient temperature 10°C to 35°C (50°F to 95°F) and object temperature above 0°C (32°F)			
Spotmeter	Center spot			
Area	Box with max/min			
Isotherm	Above alarm, below alarm			
Data communication and interfaces				
Interfaces	USB Micro: data transfer to and from PC and Mac device			
Wi-Fi	Peer-to-peer or infrastructure			
File format	Standard JPEG, 14-bit measurement data included			
General				
Operating temperature range	-15°C to 50°C (5°F to 122°F)			
Battery	Rechargeable 3.6 V Li ion battery			
Battery operating time	Approx. 4 hours at 25°C (77°F) ambient temperature and typical use			
Battery charging time	2.5 hours to 90% capacity in camera. 2 hours in charger			
Drop	2 m (6.6 ft.)			
Camera weight, incl. battery	0.575 kg (1.27 lb.)			
Camera size (L × W × H)	244 × 95 × 140 mm (9.6 × 3.7 × 5.5 in)			
Box contents	Infrared camera, hard transport case, battery, USB cable, power supply/charger with EU, UK, US and Australian plugs, printed documentation			

ACCESSORIES

- CASES AND POUCHES
  - Pouch for FLIR E-Series (T911689ACC)
  - Pouch with Shoulder Strap (T198529)
- BATTERIES AND POWER
  - Battery Charger (T198531)
  - Battery Li-ion 3.6 V, 2.6 Ah, 9.4 Wh (T199362ACC)
  - Car Charger (T198532)
  - Power Supply (T198534)
- CABLES AND ADAPTERS
  - USB cable, USB-A to USB Micro-B (T198533)
- STRAPS AND HOLSTERS
  - Tool Belt (T911093)
- SOFTWARE
  - FLIR Thermal Studio Suite
  - FLIR Tools App

FLIR E6-XT

Infrared Camera with Extended Temperature Range

FLIR E6-XT is the perfect tool for diagnosing electrical, mechanical, and building problems, thanks to its 43.200 (240 × 180) pixel infrared detector and expanded, -20°C to 550°C (-4°F to 1022°F) temperature range. FLIR MSX® image enhancement provides extraordinary thermal imaging detail, while the built-in Wi-Fi allows users to quickly connect with the FLIR Tools® Mobile app for sharing images and sending reports easily from any location.

FLIR E6-XT

Infrared Camera with Extended Temperature Range

SIMPLE, INTUITIVE CONTROLS

- Automatic and focus-free, with clear on-screen navigation to measurement tools and settings

SHARE IMAGES AND FINDINGS EASILY

- Download standard JPEGS, create reports, and share what you've found via a Wi-Fi connection to the FLIR Tools Mobile app

BUILT FOR YOUR TOUGH WORK ENVIRONMENT

- Lightweight and well-balanced, the E6-XT has an IP54 enclosure and easily withstands a 2-meter drop test

FLIR E6-XT

Infrared Camera with Extended Temperature Range

Image and optical data	E4	E5-XT	E6-XT	E8-XT
IR resolution	80 × 60 (4,800 pixels)	160 × 120 (19,200 pixels)	240 × 180 (43,200 pixels)	320 × 240 (76,800 pixels)
Thermal sensitivity/NETD	<0.15°C (0.27°F) / <150 mK	<0.10°C (0.27°F) / <100 mK	<0.06°C (0.11°F) / <60 mK	<0.05°C (0.09°F) / <50 mK
Spatial resolution (IFOV)	10.3 mrad	5.2 mrad	3.4 mrad	2.6 mrad
Field of view (FOV)	45° × 34°			
F-number	1.5			
Image frequency	9 Hz			
Focus	Focus-free			
Detector data				
Detector type	Focal Plane Array (FPA), uncooled microbolometer			
Spectral range	7.5–13 µm			
Image presentation and modes				
Display	3" 320 × 240 color LCD			
Image adjustment	Automatic adjust/lock image			
Image modes	Thermal MSX, thermal, picture-in-picture, thermal blending, digital camera			
Color palettes	Iron, Rainbow, Black & White			
Measurement and analysis				
Object temperature range	–20°C to 250°C (–4°F to 482°F)	-20°C to 400°C (-4°F to 752°F) in two ranges	-20°C to 550°C (-4°F to 1022°F) in two ranges	-20°C to 550°C (-4°F to 1022°F) in two ranges
Accuracy	±2°C (±3.6°F) or ±2% of reading for ambient temperature 10°C to 35°C (50°F to 95°F) and object temperature above 0°C (32°F)			
Spotmeter	Center spot			
Area	Box with max/min			
Isotherm	Above alarm, below alarm			
Data communication and interfaces				
Interfaces	USB Micro: data transfer to and from PC and Mac device			
Wi-Fi	Peer-to-peer or infrastructure			
File format	Standard JPEG, 14-bit measurement data included			
General				
Operating temperature range	-15°C to 50°C (5°F to 122°F)			
Battery	Rechargeable 3.6 V Li ion battery			
Battery operating time	Approx. 4 hours at 25°C (77°F) ambient temperature and typical use			
Battery charging time	2.5 hours to 90% capacity in camera. 2 hours in charger			
Drop	2 m (6.6 ft.)			
Camera weight, incl. battery	0.575 kg (1.27 lb.)			
Camera size (L × W × H)	244 × 95 × 140 mm (9.6 × 3.7 × 5.5 in)			
Box contents	Infrared camera, hard transport case, battery, USB cable, power supply/charger with EU, UK, US and Australian plugs, printed documentation			

ACCESSORIES

- CASES AND POUCHES
  - Pouch for FLIR E-Series (T911689ACC)
  - Pouch with Shoulder Strap (T198529)
- BATTERIES AND POWER
  - Battery Charger (T198531)
  - Battery Li-ion 3.6 V, 2.6 Ah, 9.4 Wh (T199362ACC)
  - Car Charger (T198532)
  - Power Supply (T198534)
- CABLES AND ADAPTERS
  - USB cable, USB-A to USB Micro-B (T198533)
- STRAPS AND HOLSTERS
  - Tool Belt (T911093)
- SOFTWARE
  - FLIR Thermal Studio Suite
  - FLIR Tools App

FLIR E8-XT

Infrared Camera with Extended Temperature Range

FLIR E8-XT is the perfect tool for diagnosing electrical, mechanical, and building problems, thanks to its 76,800 (320 x 240) pixel infrared detector and expanded, -20°C to 550°C (-4°F to 1022°F) temperature range. FLIR MSX® image enhancement provides extraordinary thermal imaging detail, while the built-in Wi-Fi allows users to quickly connect with the FLIR Tools® Mobile app for sharing images and sending reports easily from any location.

FLIR E8-XT

Infrared Camera with Extended Temperature Range

SIMPLE, INTUITIVE CONTROLS

- Automatic and focus-free, with clear on-screen navigation to measurement tools and settings

SHARE IMAGES AND FINDINGS EASILY

- Download standard JPEGS, create reports, and share what you've found via a Wi-Fi connection to the FLIR Tools Mobile app

BUILT FOR YOUR TOUGH WORK ENVIRONMENT

- Lightweight and well-balanced, the E6-XT has an IP54 enclosure and easily withstands a 2-meter drop test

FLIR E8-XT

Infrared Camera with Extended Temperature Range

Image and optical data	E4	E5-XT	E6-XT	E8-XT
IR resolution	80 × 60 (4,800 pixels)	160 × 120 (19,200 pixels)	240 × 180 (43,200 pixels)	320 × 240 (76,800 pixels)
Thermal sensitivity/NETD	<0.15°C (0.27°F) / <150 mK	<0.10°C (0.27°F) / <100 mK	<0.06°C (0.11°F) / <60 mK	<0.05°C (0.09°F) / <50 mK
Spatial resolution (IFOV)	10.3 mrad	5.2 mrad	3.4 mrad	2.6 mrad
Field of view (FOV)	45° × 34°			
F-number	1.5			
Image frequency	9 Hz			
Focus	Focus-free			
Detector data				
Detector type	Focal Plane Array (FPA), uncooled microbolometer			
Spectral range	7.5–13 µm			
Image presentation and modes				
Display	3" 320 × 240 color LCD			
Image adjustment	Automatic adjust/lock image			
Image modes	Thermal MSX, thermal, picture-in-picture, thermal blending, digital camera			
Color palettes	Iron, Rainbow, Black & White			
Measurement and analysis				
Object temperature range	–20°C to 250°C (–4°F to 482°F)	-20°C to 400°C (-4°F to 752°F) in two ranges	-20°C to 550°C (-4°F to 1022°F) in two ranges	-20°C to 550°C (-4°F to 1022°F) in two ranges
Accuracy	±2°C (±3.6°F) or ±2% of reading for ambient temperature 10°C to 35°C (50°F to 95°F) and object temperature above 0°C (32°F)			
Spotmeter	Center spot			
Area	Box with max/min			
Isotherm	Above alarm, below alarm			
Data communication and interfaces				
Interfaces	USB Micro: data transfer to and from PC and Mac device			
Wi-Fi	Peer-to-peer or infrastructure			
File format	Standard JPEG, 14-bit measurement data included			
General				
Operating temperature range	-15°C to 50°C (5°F to 122°F)			
Battery	Rechargeable 3.6 V Li ion battery			
Battery operating time	Approx. 4 hours at 25°C (77°F) ambient temperature and typical use			
Battery charging time	2.5 hours to 90% capacity in camera. 2 hours in charger			
Drop	2 m (6.6 ft.)			
Camera weight, incl. battery	0.575 kg (1.27 lb.)			
Camera size (L × W × H)	244 × 95 × 140 mm (9.6 × 3.7 × 5.5 in)			
Box contents	Infrared camera, hard transport case, battery, USB cable, power supply/charger with EU, UK, US and Australian plugs, printed documentation			

ACCESSORIES

- CASES AND POUCHES
  - Pouch for FLIR E-Series (T911689ACC)
  - Pouch with Shoulder Strap (T198529)
- BATTERIES AND POWER
  - Battery Charger (T198531)
  - Battery Li-ion 3.6 V, 2.6 Ah, 9.4 Wh (T199362ACC)
  - Car Charger (T198532)
  - Power Supply (T198534)
- CABLES AND ADAPTERS
  - USB cable, USB-A to USB Micro-B (T198533)
- STRAPS AND HOLSTERS
  - Tool Belt (T911093)
- SOFTWARE
  - FLIR Thermal Studio Suite
  - FLIR Tools App

FLIR EX Accessories

Pouch for FLIR E-Series (T911689ACC)

Pouch, including shoulder strap, for the FLIR Ex series and FLIR Exx series.

848-1444

Hard Transport Case (T198528)

Hard transport case for FLIR Ex-series.

Battery Li-ion 3.6 V, 2.6 Ah, 9.4 Wh (T199362ACC)

Battery pack for FLIR Ex series.

135-3291

Battery Charger (T198531)

Battery charger incl. power supply.

848-1384

Car Charger (T198532)

This cable is used to power the infrared camera from the 12 V socket in a car.

848-1387

USB cable, USB-A to USB Micro-B (T198533)

This cable is used to connect the infrared camera with a computer, using the USB protocol.

848-1393

Power Supply (T198534)

Power supply USB-micro.

848-1381

Tool Belt (T911093)

Tool belt for FLIR camera pouches.

FLIR Exx

FLIR E96

Advanced Thermal Imaging Camera

302-00-926

FLIR E86

Advanced Thermal Imaging Camera

302-00-925

FLIR E76

Advanced Thermal Imaging Camera

302-00-924

FLIR E54

Advanced Thermal Imaging Camera

302-00-923

Accessories

FLIR E54

Advanced Thermal Imaging Camera

The FLIR E54 is your entry into the Exx-Series, offering the resolution and sensitivity you need for basic condition monitoring, electrical/mechanical inspection, and building inspection. The 320 × 240 pixel thermal detector accurately measures temperatures up to 650°C (1202°F) and produces crisp, vibrant imagery that can be enhanced with patented FLIR MSX® technology for added detail and perspective. The onboard FLIR Inspection Route runs pre-planned routes to help you stay organized when surveying large or multiple locations. FLIR Ignite provides automatic uploading of E54 images directly from the camera to the cloud for easy, secure storage and sharing.

FLIR E54

Advanced Thermal Imaging Camera

IMPROVED CONTRAST FOR FASTER TROUBLESHOOTING

- Use FLIR 1-Touch Level/Span to instantly improve image contrast and highlight potential electrical or mechanical issues.

FEATURES TO HELP WITH DIAGNOSIS

- The E54 measures up to 650°C (1202°F), offers 3 spotmeters, and displays the max/min temperature within an area live, on-screen.

STREAMLINED REPORTING

- Onboard integration with FLIR routing software*, automatic image upload directly to the FLIR Ignite cloud library, a built-in mic for voice annotation, and report generation features all help the E54 streamline your workday. (*Optional accessory software)

FLIR Exx

Advanced Thermal Imaging Camera

Model	E54	E76	E86	E96
IR resolution	320 × 240 pixels	320 × 240 pixels	464 × 348 pixels	640 × 480 pixels
Resolution with UltraMax® enhancement	—	307,200 pixels	645,888 pixels	1.2 megapixels
MSX® image enhancement	Yes: details from visual camera add depth and perspective			
Built-in visual camera	5 MP, fixed focus, with built in LED light			
Thermal sensitivity	<40 mK @ 30°C (86°F)	<30 mK @ 30°C (86°F), 42°lens	<30 mK @ 30°C (86°F), 42°lens	<30 mK @ 30°C (86°F), 42°lens
Temperature range	-20°C to 120°C (-4°F to 248°F); 0°C to 650°C (32°F to 1202°F)	-20°C to 120°C (-4°F to 248°F); 0°C to 650°C (32°F to 1202°F)	-20°C to 120°C (-4°F to 248°F); 0°C to 650°C (32°F to 1202°F); 300°C to 1500°C (572°F to 2732°F)	-20°C to 120°C (-4°F to 248°F); 0°C to 650°C (32°F to 1202°F); 300°C to 1500°C (572°F to 2732°F)
Optional temperature range	—	300°C to 1000°C (572°F to 1832°F)		
Accuracy	±2°C (±3.6°F) or ±2% of the reading			
Focus modes	Manual	Continuous laser distance meter (LDM), one-shot LDM, one-shot contrast, manual		
Digital zoom	1–4x continuous			1–8x continuous
Measurement tools	3 spotmeters in live mode, 1 area meter in live mode	3 spotmeters in live mode, 3 area meters in live mode		
Measurement presets	None, center spot, hot spot, cold spot, 3 spots, hot spot- spot*	None, center spot, hot spot, cold spot, User Presets 1&2		
Available lenses	None (fixed lens)	14°, 24°, 42°, macro (2x)		
Lens identification	—	Automatic (FLIR AutoCalTM)		
1-Touch Level/Span	Yes: automatic contrast enhancement			
Laser pointer	Yes			
Laser distance meter	—	Yes		
Area measurement information	—	—	Yes	
On-camera routing software	FLIR Inspection RouteTM — enabled			
On-camera report building	Voice annotation and GPS tagging to images and video; on-screen text; sketch on infrared images from touchscreen			
FLIR software integration	FLIR Thermal Studio Suite, FLIR Research Studio			
Radiometric JPEG	Yes			
IR, radiometric, visual video recording	Yes			
IR, radiometric, visual video streaming	Yes, over UVC (radiometric, non-radiometric, visual) and Wi-Fi (non-radiometric, visual)			
Communication modes	USB 2.0, Bluetooth®, Wi-Fi, DisplayPort			
Cloud services	FLIR Ignite™ for direct, secure image uploading, organizing, and sharing via Wi-Fi (firmware update required for models purchased prior to 2022)			
METERLiNK®	Yes via Bluetooth			
Display	640 × 480 pixels (VGA) Dragontrail® touchscreen			
Drop-testing	2 m (6.6 ft)			
Battery operation time	>2.5 hours, typical use			
*Hot spot to center spot Delta measurement Specifications are subject to change. For the most up-to-date specifications, please visit teledyneflir.com.				

FLIR E76

Advanced Thermal Imaging Camera

The FLIR E76 offers complete coverage of near and distant targets through a range of interchangeable AutoCal™ lenses, with fields of view for everything from wide-angle roof inspections to electrical inspections performed from a safe distance. A step up from the FLIR E54, the E76 includes an optional temperature range to 1000°C (1832°F), laser-assisted autofocus, and 3 area measurement boxes. The 320 × 240 thermal resolution produces crisp, vibrant imagery that can be enhanced with patented FLIR MSX® technology for added detail and perspective. The onboard FLIR Inspection Route runs pre-planned routes to help you stay organized when surveying large or multiple locations. FLIR Ignite provides automatic uploading of E76 images directly from the camera to the cloud for easy, secure storage and sharing.

FLIR E76

Advanced Thermal Imaging Camera

INTERCHANGEABLE, AUTO-CALIBRATING LENSES

- Telephoto, standard, and wide angle AutoCal™ lenses help users survey large targets quickly, check machines for signs of failure, or inspect electrical systems safely.

IMPROVED CONTRAST FOR FASTER DIAGNOSIS

- Use FLIR 1-Touch Level/Span to instantly improve image contrast and highlight potential electrical or mechanical issues.

STREAMLINED REPORTING

- Onboard integration with FLIR routing software*, automatic image upload directly to the FLIR Ignite cloud library, a built-in mic for voice annotation, and report generation features all help the E76 streamline your workday. (*Optional accessory software)

FLIR Exx

Advanced Thermal Imaging Camera

Model	E54	E76	E86	E96
IR resolution	320 × 240 pixels	320 × 240 pixels	464 × 348 pixels	640 × 480 pixels
Resolution with UltraMax® enhancement	—	307,200 pixels	645,888 pixels	1.2 megapixels
MSX® image enhancement	Yes: details from visual camera add depth and perspective			
Built-in visual camera	5 MP, fixed focus, with built in LED light			
Thermal sensitivity	<40 mK @ 30°C (86°F)	<30 mK @ 30°C (86°F), 42°lens	<30 mK @ 30°C (86°F), 42°lens	<30 mK @ 30°C (86°F), 42°lens
Temperature range	-20°C to 120°C (-4°F to 248°F); 0°C to 650°C (32°F to 1202°F)	-20°C to 120°C (-4°F to 248°F); 0°C to 650°C (32°F to 1202°F)	-20°C to 120°C (-4°F to 248°F); 0°C to 650°C (32°F to 1202°F); 300°C to 1500°C (572°F to 2732°F)	-20°C to 120°C (-4°F to 248°F); 0°C to 650°C (32°F to 1202°F); 300°C to 1500°C (572°F to 2732°F)
Optional temperature range	—	300°C to 1000°C (572°F to 1832°F)		
Accuracy	±2°C (±3.6°F) or ±2% of the reading			
Focus modes	Manual	Continuous laser distance meter (LDM), one-shot LDM, one-shot contrast, manual		
Digital zoom	1–4x continuous			1–8x continuous
Measurement tools	3 spotmeters in live mode, 1 area meter in live mode	3 spotmeters in live mode, 3 area meters in live mode		
Measurement presets	None, center spot, hot spot, cold spot, 3 spots, hot spot- spot*	None, center spot, hot spot, cold spot, User Presets 1&2		
Available lenses	None (fixed lens)	14°, 24°, 42°, macro (2x)		
Lens identification	—	Automatic (FLIR AutoCalTM)		
1-Touch Level/Span	Yes: automatic contrast enhancement			
Laser pointer	Yes			
Laser distance meter	—	Yes		
Area measurement information	—	—	Yes	
On-camera routing software	FLIR Inspection RouteTM — enabled			
On-camera report building	Voice annotation and GPS tagging to images and video; on-screen text; sketch on infrared images from touchscreen			
FLIR software integration	FLIR Thermal Studio Suite, FLIR Research Studio			
Radiometric JPEG	Yes			
IR, radiometric, visual video recording	Yes			
IR, radiometric, visual video streaming	Yes, over UVC (radiometric, non-radiometric, visual) and Wi-Fi (non-radiometric, visual)			
Communication modes	USB 2.0, Bluetooth®, Wi-Fi, DisplayPort			
Cloud services	FLIR Ignite™ for direct, secure image uploading, organizing, and sharing via Wi-Fi (firmware update required for models purchased prior to 2022)			
METERLiNK®	Yes via Bluetooth			
Display	640 × 480 pixels (VGA) Dragontrail® touchscreen			
Drop-testing	2 m (6.6 ft)			
Battery operation time	>2.5 hours, typical use			
*Hot spot to center spot Delta measurement Specifications are subject to change. For the most up-to-date specifications, please visit teledyneflir.com.				

FLIR E86

Advanced Thermal Imaging Camera

The FLIR E86 is packed with the high-performance features needed for fast, accurate detection of hot spots and hidden deficiencies. This 464 × 348 pixel thermal camera has an expanded temperature measurement range for easier detection of hot spots and hidden anomalies on electrical and mechanical assets. Interchangeable AutoCal™ lenses offer complete coverage of near and distant targets, while FLIR imaging technology such as UltraMax® and MSX® ensure crisp, vibrant thermal images. The onboard FLIR Inspection Route runs pre-planned routes to help you stay organized when surveying large or multiple locations. FLIR Ignite provides automatic uploading of E86 images directly from the camera to the cloud for easy, secure storage and sharing.

FLIR E86

Advanced Thermal Imaging Camera

LASER DISTANCE MEASUREMENT

- The laser distance meter aids in quick, precise autofocusing and provides data for on-screen area measurement (m^2 or ft^2).

INTELLIGENT AUTOCAL™ OPTICS

- Interchangeable, auto-calibrating lenses—from telephoto to wide-angle—allow users to target electrical hot spots safely, check for mechanical faults, and survey roofs or building envelopes quickly.

STREAMLINED REPORTING

- Onboard integration with FLIR routing software*, automatic image upload directly to the FLIR Ignite cloud library, a built-in mic for voice annotation, and report generation features all help the E86 streamline your workday. (*Optional accessory software)

FLIR Exx

Advanced Thermal Imaging Camera

Model	E54	E76	E86	E96
IR resolution	320 × 240 pixels	320 × 240 pixels	464 × 348 pixels	640 × 480 pixels
Resolution with UltraMax® enhancement	—	307,200 pixels	645,888 pixels	1.2 megapixels
MSX® image enhancement	Yes: details from visual camera add depth and perspective			
Built-in visual camera	5 MP, fixed focus, with built in LED light			
Thermal sensitivity	<40 mK @ 30°C (86°F)	<30 mK @ 30°C (86°F), 42°lens	<30 mK @ 30°C (86°F), 42°lens	<30 mK @ 30°C (86°F), 42°lens
Temperature range	-20°C to 120°C (-4°F to 248°F); 0°C to 650°C (32°F to 1202°F)	-20°C to 120°C (-4°F to 248°F); 0°C to 650°C (32°F to 1202°F)	-20°C to 120°C (-4°F to 248°F); 0°C to 650°C (32°F to 1202°F); 300°C to 1500°C (572°F to 2732°F)	-20°C to 120°C (-4°F to 248°F); 0°C to 650°C (32°F to 1202°F); 300°C to 1500°C (572°F to 2732°F)
Optional temperature range	—	300°C to 1000°C (572°F to 1832°F)		
Accuracy	±2°C (±3.6°F) or ±2% of the reading			
Focus modes	Manual	Continuous laser distance meter (LDM), one-shot LDM, one-shot contrast, manual		
Digital zoom	1–4x continuous			1–8x continuous
Measurement tools	3 spotmeters in live mode, 1 area meter in live mode	3 spotmeters in live mode, 3 area meters in live mode		
Measurement presets	None, center spot, hot spot, cold spot, 3 spots, hot spot- spot*	None, center spot, hot spot, cold spot, User Presets 1&2		
Available lenses	None (fixed lens)	14°, 24°, 42°, macro (2x)		
Lens identification	—	Automatic (FLIR AutoCalTM)		
1-Touch Level/Span	Yes: automatic contrast enhancement			
Laser pointer	Yes			
Laser distance meter	—	Yes		
Area measurement information	—	—	Yes	
On-camera routing software	FLIR Inspection RouteTM — enabled			
On-camera report building	Voice annotation and GPS tagging to images and video; on-screen text; sketch on infrared images from touchscreen			
FLIR software integration	FLIR Thermal Studio Suite, FLIR Research Studio			
Radiometric JPEG	Yes			
IR, radiometric, visual video recording	Yes			
IR, radiometric, visual video streaming	Yes, over UVC (radiometric, non-radiometric, visual) and Wi-Fi (non-radiometric, visual)			
Communication modes	USB 2.0, Bluetooth®, Wi-Fi, DisplayPort			
Cloud services	FLIR Ignite™ for direct, secure image uploading, organizing, and sharing via Wi-Fi (firmware update required for models purchased prior to 2022)			
METERLiNK®	Yes via Bluetooth			
Display	640 × 480 pixels (VGA) Dragontrail® touchscreen			
Drop-testing	2 m (6.6 ft)			
Battery operation time	>2.5 hours, typical use			
*Hot spot to center spot Delta measurement Specifications are subject to change. For the most up-to-date specifications, please visit teledyneflir.com.				

FLIR E96

Advanced Thermal Imaging Camera

The FLIR E96 is our first pistol-grip camera with 640 × 480 thermal resolution so inspectors can survey high-voltage, hazardous targets safely and quickly diagnose electrical and mechanical failures. Interchangeable AutoCal™ lenses offer complete coverage of near and distant targets, with the laser distance meter ensuring the crisp focus needed for accurate temperature measurement. The onboard FLIR Inspection Route runs pre-planned routes to help inspectors stay organized when surveying large or multiple locations. FLIR Ignite provides automatic uploading of E96 images directly from the camera to the cloud for easy, secure storage and sharing.

FLIR E96

Advanced Thermal Imaging Camera

OUTSTANDING THERMAL IMAGERY

- The 640 × 480 thermal resolution plus FLIR UltraMax® and MSX® image enhancement ensure the E96 produces the most virbrant, easiest-to-interpret images in its class.

INTELLIGENT AUTOCAL™ OPTICS

- Interchangeable, auto-calibrating lenses—from telephoto to wide-angle—allow users to target electrical hot spots safely, check for mechanical faults, and survey roofs or building envelopes quickly.

STREAMLINED REPORTING

- Onboard integration with FLIR routing software*, automatic image upload directly to the FLIR Ignite cloud library, a built-in mic for voice annotation, and report generation features all help the E96 streamline your workday. (*Optional accessory software)

FLIR Exx

Advanced Thermal Imaging Camera

Model	E54	E76	E86	E96
IR resolution	320 × 240 pixels	320 × 240 pixels	464 × 348 pixels	640 × 480 pixels
Resolution with UltraMax® enhancement	—	307,200 pixels	645,888 pixels	1.2 megapixels
MSX® image enhancement	Yes: details from visual camera add depth and perspective			
Built-in visual camera	5 MP, fixed focus, with built in LED light			
Thermal sensitivity	<40 mK @ 30°C (86°F)	<30 mK @ 30°C (86°F), 42°lens	<30 mK @ 30°C (86°F), 42°lens	<30 mK @ 30°C (86°F), 42°lens
Temperature range	-20°C to 120°C (-4°F to 248°F); 0°C to 650°C (32°F to 1202°F)	-20°C to 120°C (-4°F to 248°F); 0°C to 650°C (32°F to 1202°F)	-20°C to 120°C (-4°F to 248°F); 0°C to 650°C (32°F to 1202°F); 300°C to 1500°C (572°F to 2732°F)	-20°C to 120°C (-4°F to 248°F); 0°C to 650°C (32°F to 1202°F); 300°C to 1500°C (572°F to 2732°F)
Optional temperature range	—	300°C to 1000°C (572°F to 1832°F)		
Accuracy	±2°C (±3.6°F) or ±2% of the reading			
Focus modes	Manual	Continuous laser distance meter (LDM), one-shot LDM, one-shot contrast, manual		
Digital zoom	1–4x continuous			1–8x continuous
Measurement tools	3 spotmeters in live mode, 1 area meter in live mode	3 spotmeters in live mode, 3 area meters in live mode		
Measurement presets	None, center spot, hot spot, cold spot, 3 spots, hot spot- spot*	None, center spot, hot spot, cold spot, User Presets 1&2		
Available lenses	None (fixed lens)	14°, 24°, 42°, macro (2x)		
Lens identification	—	Automatic (FLIR AutoCalTM)		
1-Touch Level/Span	Yes: automatic contrast enhancement			
Laser pointer	Yes			
Laser distance meter	—	Yes		
Area measurement information	—	—	Yes	
On-camera routing software	FLIR Inspection RouteTM — enabled			
On-camera report building	Voice annotation and GPS tagging to images and video; on-screen text; sketch on infrared images from touchscreen			
FLIR software integration	FLIR Thermal Studio Suite, FLIR Research Studio			
Radiometric JPEG	Yes			
IR, radiometric, visual video recording	Yes			
IR, radiometric, visual video streaming	Yes, over UVC (radiometric, non-radiometric, visual) and Wi-Fi (non-radiometric, visual)			
Communication modes	USB 2.0, Bluetooth®, Wi-Fi, DisplayPort			
Cloud services	FLIR Ignite™ for direct, secure image uploading, organizing, and sharing via Wi-Fi (firmware update required for models purchased prior to 2022)			
METERLiNK®	Yes via Bluetooth			
Display	640 × 480 pixels (VGA) Dragontrail® touchscreen			
Drop-testing	2 m (6.6 ft)			
Battery operation time	>2.5 hours, typical use			
*Hot spot to center spot Delta measurement Specifications are subject to change. For the most up-to-date specifications, please visit teledyneflir.com.				

FLIR Exx Accessories

Lens Case (T300437ACC)

Battery (T199330ACC)

301-79-256

Battery Charger (T199425ACC)

301-79-419

Power Supply for Battery Charger (T911633ACC)

301-79-423

Mounting KIT (T300369)

HDMI Splitter (T911998)

USB 2.0 A to USB Type-C cable (T911631ACC)

USB Type-C to USB Type-C cable (T911705ACC)

14° Lens with case (T199588)

24° Lens with case (T199589)

42° Lens with case (T199590)

301-79-421

FLIR Macro Lens 2.0x with Case (T300238)

Bluetooth Headset (T197771ACC)

176-66-932

Remote operation button (T131171ACC)

Tripod (T911997)

Hard transport case (T199346ACC)

Electronic Test Bench

FLIR ETS320

Thermal Imaging System for Electronics Testing

300-87-535

FLIR ETS320

Thermal Imaging System for Electronics Testing

Whether the goal is product testing or scientific research, heat can be an important indicator of how a system is functioning. The FLIR ETS320 is a non-contact thermal measurement system that pairs a high-sensitivity infrared camera with an integrated stand, for hands-free measurement of printed circuit boards and other small electronics.

FLIR ETS320

Thermal Imaging System for Electronics Testing

REDUCE TEST TIMES

The FLIR ETS320 takes the guesswork out of thermal testing, for fast discovery of hot spots and potential points of failure.

- Sensitive enough to detect temperature shifts smaller than 0.06°C
- Wide temperature range, from -20°C to 250°C, for quantifying heat generation and thermal dissipation
- Measures small components down to 170 µm per pixel spot size

IMPROVE PRODUCT DESIGN

The FLIR ETS320 promotes design improvements and shortens product development time by detecting design flaws that materialize as heat.

- 320 x 240 IR sensor offers 76,800 points of non-contact temperature measurement
- True 45° field of view for broad initial scans to identify potential problems
- Measurement accuracy of ±3°C promotes quality assurance and factory acceptance of PCBs

DESIGNED FOR BENCHTOP WORK

The ETS320 is designed for hands-free laboratory testing, with simplified features that allow users to focus on their work instead of on the camera controls.

- Pole mount included for fast and easy setup
- Crisp 3” LCD display provides immediate thermal feedback
- FLIR Tools+ software for instant analysis, including Time vs. Temperature measurement

FLIR ETS320

Thermal Imaging System for Electronics Testing

System Overview	ETS320
IR Resolution	320 x 240 (76,800 pixels)
Detector Type	Uncooled microbolometer
Spectral Range	7.5 - 13.0 µm
Thermal Sensitivity/NETD	< 0.06°C
Field of View (FOV)	45° x 34°
Fixed Focus Distance	70 mm ± 10 mm
F-number	1.5
Spot Size @Min. Focus	170 µm
Image Frequency	9 Hz
Measurement and Analysis	
Object Temperature Range	-20°C to 250°C (-4°F to 482°F)
Accuracy	±3°C or ±3% of reading for ambient temperature 10°C to 35°C (50°F to 95°F)
Spotmeter	Center spot
Area	Box with max/min
Emissivity Correction	Variable from 0.1 to 1.0
Emissivity Table	Table of pre-defined materials
Reflected Apparent Temperature Correction	Automatic, based on input of reflected temperature
Storage of Images	
Image File Formats	Standard radiometric JPEG, 14-bit measurement data included
Video Streaming	
Radiometric IR Video Streaming	Full dynamic to PC (FLIR Tools/Tools+) using USB
Non-Radiometric IR Video Streaming	Uncompressed colorized video using USB
Data Communication Interfaces	
Interfaces	USB Micro: data transfer to and from PC and Mac devices
Power System	
Battery Type	Li-ion battery, charged in camera
Battery Operating Time	Approx. 4 hours at 25°C (77°F) ambient temperature and typical use
Charging Time	2.5 hrs to 90% capacity
Additional Data	
Display	3 in, 320 x 240 pixel color LCD
Operating Temperature Range	10°C to 40°C (50°F to 104°F)
Storage Temperature Range	-40°C to 70°C (-40°F to 158°F)
Directives and Regulations	• Battery Directive 2006/66/EC • EMI/EMC Directive 2014/30/EU • WEEE Directive 2012/19/EC • RoHS2 Directive 2011/65/EC • FCC 47 CFR Part 15 Class B • REACH Regulation EC 1907/2006
Encapsulation, Shock, Vibration	• IP 40 (IEC 60529)
Camera Weight, Incl. Battery	0.575 kg (1.27 lbs)
Camera Size (L × W × H)	22 x 15 x 30 cm (8.7 x 5.9 x 11.8 in)
FLIR ETS320 Includes:	
List of Contents	Camera, mount, stand, power supply, USB cable, FLIR Tools+ software

IR Windows

 Infrared Camera Window with PIRma-Lock	FLIR IR Windows IRW 2 inch	FLIR IR Windows IRW 3 inch	FLIR IR Windows IRW 4 inch
 Infrared Camera Window with PIRma-Lock	FLIR IR Windows IRW Stainless 2 inch	FLIR IR Windows IRW Stainless 3 inch 301-16-397	FLIR IR Windows IRW Stainless 4 inch 301-16-398
 Large Format Infrared Inspection Window	FLIR IRW-xPC IRW-PC 6 inch 301-25-613	FLIR IRW-xPC IRW-PC 12 inch 301-25-609	FLIR IRW-xPC IRW-PC 24 inch 301-25-611
 Large Format Infrared Inspection Window	FLIR IRW-xPS IRW-PS Stainless 6 inch 301-25-614	FLIR IRW-xPS IRW-PS Stainless 12 inch 301-25-610	FLIR IRW-xPS IRW-PS Stainless 24 inch 301-25-612

FLIR IR Windows

Anodized Aluminum or Stainless-Steel Windows with PIRma-Lock™

FLIR's IR Windows add a barrier between you and energized equipment, protecting you from arc flash accidents. IR windows are easy to install, easy to use, and will help you work with greater confidence. You'll perform inspections more efficiently and reduce the threat of arc flash injury, all while staying in compliance with NFPA 70E requirements. Choose the anodized aluminum frame or opt for durable stainless steel to prevent mixed metal issues.

Model: FLIR IR Window 2 inch

Model: FLIR IR Window 3 inch

Model: FLIR IR Window 4 inch

Model: FLIR IR Window Stainless 2 inch

Model: FLIR IR Window Stainless 3 inch

Model: FLIR IR Window Stainless 4 inch

FLIR IR Windows

Anodized Aluminum or Stainless-Steel Windows with PIRma-Lock™

BROADBAND TRANSMISSION

- FLIR IR Windows' broadband crystal lenses transmit short, mid, and longwave IR while also allowing illumination to shine through.

PIRMA-LOCK™ RELIABILITY

- FLIR'S tried-and-true PIRma-Lock™ locknut technology holds the ring in place so there's no need for extra screws.

DURABLE STAINLESS STEEL OPTION

- Choose the standard anti-corrosion anodized aluminum frame, or if there are mixed-metal concerns, opt for durable stainless steel.

FLIR IR Windows

Anodized Aluminum or Stainless-Steel Windows with PIRma-Lock™

Model/Size	IRW-2C/2S 2" Window	IRW-3C/3S 3" Window	IRW-4C/4S 4" Window
NEMA Environment Type	Type 4/12 (outdoor/indoor)	Type 4/12 (outdoor/indoor)	Type 4/12 (outdoor/indoor)
Voltage Range	Any	Any	Any
Automatically Grounded	Yes	Yes	Yes
Maximum Operating Temperature	260°C/500°F	260°C/500°F	260°C/500°F
Body Material - IRW-xC Type	Anodized aluminum	Anodized aluminum	Anodized aluminum
Body Material - IRW-xS Type	AISI-grade 316 stainless steel	AISI-grade 316 stainless steel	AISI-grade 316 stainless steel
Gasket Material	Silicone	Silicone	Silicone
Hardware Material	Steel	Steel	Steel
Size Specifications			
Overall Height	85.5 mm (3.36 in)	107.4 mm (4.22 in)	136.5 mm (5.37 in)
Overall Width	73 mm (2.87 in)	99 mm (3.89 in)	127.44 mm (5.01 in)
Overall Thickness	25.5 mm (1.00 in)	26.86 mm (1.05 in)	29.25 mm (1.15 in)
Required Hole Diameter (Nominal)	60.3 mm (2 3/8 in)	88.9 mm (3 1/2 in)	114.3 mm (4 1/2 in)
Greenlee Punch	76BB	739BB	742BB
Recommended Max. Panel Thickness	3.2 mm (1/8 in)	3.2 mm (1/8 in)	3.2 mm (1/8 in)
Optic Specifications			
Optic Diameter	50 mm (1.97 in)	75 mm (2.95 in)	95 mm (3.74 in)
Viewing Aperture Diameter	45 mm (1.77 in)	69 mm (2.71 in)	89 mm (3.50 in)
Viewing Aperture Area	1590 mm² (2.46 in²)	3739 mm² (5.79 in²)	6221 mm² (9.64 in²)
Optic Maximum Temperature	1355.6°C (2474°F)	1355.6°C (2474°F)	1355.6°C (2474°F)
Ratings & Testing			
UL Component Recognition (UL 50V)	Yes	Yes	Yes
UL 50 / NEMA Environment Rating	Type 4/12	Type 4/12	Type 4/12
Arc Flash Testing, IEC 62271-200 (KEMA)*	5 kV, 63 kA for 30 cycles at 60 Hz	5 kV, 63 kA for 30 cycles at 60 Hz	5 kV, 63 kA for 30 cycles at 60 Hz
IP Rating, IEC 60529 (TUV)*	IP67	IP67	IP67
Vibration Testing, IEC 60068-2-6 (TUV)*	100 m/s² vibration withstand	100 m/s² vibration withstand	100 m/s² vibration withstand
Humidity Testing, IEC 60068-2-3 (TUV)*	Extreme humidity withstand	Extreme humidity withstand	Extreme humidity withstand
Mechanical Testing, ANSI/IEEE C37.20.2 Section A3.6 (TUV)*	Impact and load resistant cover	Impact and load resistant cover	Impact and load resistant cover
Maximum Pullout Strength	657 kg (1450 lbs)	1655 kg (3650 lbs)	1678 kg (3700 lbs)
CSA Certification, C22.2 No. 14 or 508	Yes	Yes	Yes

FLIR IRW-xPC/xPS

Large Format Infrared Inspection Windows

The FLIR IRW-xPC/xPS joins the existing FLIR IR Window family to help you inspect more efficiently, make inaccessible components accessible, and save money by preventing unplanned downtime. The rectangular polymer windows are impact resistant and provide the largest viewing area available to monitor completely undisturbed assets inside energized electrical equipment. IR Windows-xPC/xPS are durable and stable in harsh environments, making them suitable for most industrial settings as well as for shipboard use.

Model: FLIR IRW-PC 6 inch

Model: FLIR IRW-PC 12 inch

Model: FLIR IRW-PC 24 inch

Model: FLIR IRW-PS Stainless 6 inch

Model: FLIR IRW-PS Stainless 12 inch

Model: FLIR IRW-PS Stainless 24 inch

FLIR IRW-xPC/xPS

Large Format Infrared Inspection Windows

WORK FASTER AND SAFER

- Inspect energized equipment without opening the panel door
- Meet IP2x standard for safe maximum hole size and fail-safe design
- Tested and certified to the highest industry standards
- IRW-xPC recommended for indoor applications / IRW-xPS recommended for outdoor applications

DURABLE AND RELIABLE

- Durable with fully impact-resistant optics
- Maintains fixed and stable transmission to ensure that the temperature data collected is accurate and reliable
- Proven compatibility with acids, alkalis, UV, moisture, humidity, vibration, and high frequency noise
- Protect viewing panes from flying debris, dust, or impact with the lockable window covers

SEE MORE

- Get an unparalleled field of view with the large, rectangular viewing area
- Made with an impact-resistive polymer lens material that allows for large window designs
- Monitor using inspection tools operating in the visual, UV, and across the IR spectrum

FLIR IRW-xPC/xPS

Large Format Infrared Inspection Windows

Part Number	IRW-6PC	IRW-12PC	IRW-24PC	IRW-6PS	IRW-12PS	IRW-24PS
Overall Height	21.8 cm (8.6 in)	20.6 cm (8.1 in)	21.8 cm (8.6 in)	21.8 cm (8.6 in)	20.6 cm (8.1 in)	21.8 cm (8.6 in)
Overall Width	16 cm (6.3 in)	30.5 cm (12.0 in)	61 cm (24.0 in)	16 cm (6.3 in)	30.5 cm (12.0 in)	61 cm (24.0 in)
Optic Specifications						
Aperture Overall Height	15 cm (5.9 in)	12.7 cm (5.0 in)	15 cm (5.9 in)	15 cm (5.9 in)	12.7 cm (5.0 in)	15 cm (5.9 in)
Aperture Overall Width	9.1 cm (3.6 in)	23.6 cm (9.3 in)	53 cm (20.9 in)	9.1 cm (3.6 in)	23.6 cm (9.3 in)	53 cm (20.9 in)
Optic Temperature Range	-40°C to 325°C (-40°F to 617°F)					
Materials and Ratings						
IP/ NEMA Environment Type	IP65 / NEMA 4x			IP67 / NEMA 6		
Maximum Operating Temperature	-40°C to 200°C (-40°F to 392°F)			-40°C to 273°C (-40°F to 523°F)		
Body Material	Aluminum			Powder Coated Stainless Steel		
Optic Reinforced Grill Material	Aluminum Reinforcing Grill (IP22/ IP2x Standard)			Stainless Steel Reinforcing Grill (IP22/ IP2x Standard)		
Optic Material	UL 746 compliant, visual, UV and IR transmissive polymer; -40°C to 325°C (-40°F to 617°F)					
Gasket Material	UL 94 5VA TPE; -40°C to 273°C (-40°F to 523°F)					
Hardware Material	316 stainless steel					
Voltage Range	Any					
Automatically Grounded	Yes					
Inspection Capabilities and Applications						
Midwave IR and Longwave IR; Ultraviolet (UV); Visual Inspection; Medium/High Voltage Applications	Yes					
General Information						
Warranties	Limited Lifetime					
Certifications	Certified by UL (USA) & cUL (Canada) to the following standards: 50V, 50E, 756C: Impact and Flammability, 1558: Impact and Load Resistance, 508A: ANSI 508A			Certified by UL (USA) & cUL (Canada) to the following standards: 50V, 50E, 756C: Impact and Flammability, 746C & 746A-2012, 1558: Impact and Load Resistance, 508A: ANSI 508A		
	CSA C22.2 No. 14-13			CSA C22.2 No. 14-13, C22.2 No. 14-10, C22.2 No. 94-M91, C22.2 No. 94.1-07, C22.2 No. 94.2-07		
	IP65 / NEMA 4x			IP67 / NEMA 6		
	Lloyds of London Type Approval					
	American Bureau of Shipping (ABS)					
	DNV (Det Norske Veritas) P261.1E Maritime, Vessel and Offshore Applications					
	IEEE C37 20.2.a.3.6: Impact and Load			IEEE C37 20.7 Type 2B, C37 20.2.a.3.6: Impact and Load		
	BSI Quality ISO 9001 Certified System			IEC 62271-200, 60262271-200,60298 Appendix A, 60068-2-6:2007, 60068-2-3, 60068-2-78:2012		

FLIR Txxx

FLIR T530
Professional Thermal Camera

FLIR T540
Professional Thermal Camera

FLIR T560
Professional Thermal Camera

FLIR T840
High Performance Thermal Imaging Camera

FLIR T860
High Performance Thermal Imaging Camera

FLIR T865
High Performance Thermal Imaging Camera

Accessories

FLIR T530

Professional Thermal Camera

The FLIR T530 has the features professionals need to accurately troubleshoot hot spots and potential faults. With the 180° rotating lens platform and a bright 4" LCD, the FLIR T530 is engineered to help users diagnose hard-to-reach components in any environment. Advanced on-camera measurement tools, laser-assisted autofocus, and FLIR's industry-leading image quality ensure you'll find and diagnose problems quickly. With on-board Inspection Route mode, you can download and run survey plans to your camera from FLIR Thermal Studio Pro (with Route Creator plugin). Together these systems will help you record temperature data and imagery in a logical sequence for faster troubleshooting and repair. The purchase of a T530 camera includes a 3-month subscription to FLIR Thermal Studio Pro and FLIR Route Creator.

FLIR T530

Professional Thermal Camera

MAKE CRITICAL DECISIONS QUICKLY

- Laser-assisted autofocus guarantees you'll get tack-sharp focus for accurate temperature readings that lead to quick but solid decisions

FLEXIBLE AND ERGONOMIC

- The T530's optical block rotates 180°, so you can image targets at any angle comfortably all day long.

INTUITIVE USER INTERFACE

- The capacitive touchscreen with intuitive menu is easy to navigate, plus you can customize with two programmable buttons.

FLIR T530

Professional Thermal Camera

	T530	T540
IR Resolution	320 x 240 (76,800 pixels)	464 x 348 (161,472 pixels)
UltraMax® Resolution	307,200 effective pixels	645,888 effective pixels
Object Temperature Range	-20°C to 120°C (-4°F to 248°F) 0°C to 650°C (32°F to 1202°F) Optional Calibration: 300°C to 1200°C (572°F to 2192°F)	-20°C to 120°C (-4°F to 248°F) 0°C to 650°C (32°F to 1202°F) 300°C to 1500°C (572°F to 2732°F)
Digital Zoom	1-4x continuous	1-6x continuous
Common Features		
Detector Type and Pitch	Uncooled microbolometer, 17 µm	
Thermal Sensitivity/NETD	<30 mK @ 30°C (42° lens)	
Spectral Range	7.5 - 14.0 µm	
Image Frequency	30 Hz	
Lens Identification	Automatic	
F-Number	f/1.1 (42° lens), f/1.3 (24° lens), f/1.5 (14° lens)	
Focus	Continuous with laser distance meter (LDM), one- shot LDM, one-shot contrast, manual	
Minimum Focus Distance	42° lens – 0.15 m 24° lens – 0.15 m; optional macro mode 14° lens – 1.0 m	
Macro Mode	24° lens option / 103 µm effective spotsize	24° lens option / 71 µm effective spotsize
Programmable Buttons	2	
Image Presentation and Modes		
Display	4”, 640 x 480 pixel touchscreen LCD with auto-rotation	
Digital Camera	5 MP, with built-in LED photo/video lamp	
Color Palettes	Iron, Gray, Rainbow, Arctic, Lava, Rainbow HC	
Image Modes	Infrared, visual, MSX®, Picture-in-Picture	
Picture-in-Picture	Resizable and movable	
UltraMax®	Quadruples pixel count; activated in menu and processed in FLIR Tools	
Measurement and Analysis		
Accuracy	±2°C (±3.6°F) or ±2% of reading	
Spotmeter and Area	3 ea. in live mode	
Measurement Presets	No measurement, center spot, hot spot, cold spot, User Preset 1, User Preset 2	
Laser Pointer	Yes	
Laser Distance Meter	Yes; dedicated button	
Annotations		
Voice	60 sec. recording added to still images or video via built-in mic (has speaker) or via Bluetooth	
Text	Predefined list or touchscreen keyboard	
Image Sketch	From touchscreen, on infrared image only	
Distance, Area Measurement	Yes; calculates area inside measurement box in m^2 or ft^2	
GPS	Automatic image tagging	
METERLiNK®	Yes	
Image Storage		
Storage Media	Removable SD card	
Image File Format	Standard JPEG with measurement data included	
Time Lapse (Infrared)	10 sec to 24 hrs	

Video Recording and Streaming	
Radiometric IR Video Recording	Real-time radiometric recording (.csq)
Non-Radiometric IR or Visual Video	H.264 to memory card
Radiometric IR Video Streaming	Yes, over UVC or Wi-Fi
Non-Radiometric IR Video Streaming	H.264 or MPEG-4 over Wi-Fi MJPEG over UVC or Wi-Fi
Communication Interfaces	USB 2.0, Bluetooth, Wi-Fi
Video Out	DisplayPort over USB Type-C
Additional Data	
Battery Type	Li-ion battery, charged in camera or on separate charger
Battery Operating Time	Approx. 4 hours at 25°C (77°F) ambient temperature and typical use
Operating Temperature Range	–15°C to 50°C (5°F to 122°F)
Storage Temperature Range	–40°C to 70°C (-40°F to 158°F)
Shock/Vibration/ Encapsulation; Safety	25 g / IEC 60068-2-27, 2 g / IEC 60068-2-6 / IP 54; EN/UL/CSA/PSE 60950-1
Weight/Dimensions w/o Lens	1.3 kg (2.9 lbs), 140 x 201 x 84 mm (5.5 x 7.9 x 3.3 in)
Box Contents	
Packaging	Infrared camera with lens, 2 batteries, battery charger, hard transport case, lanyards, front lens cap, power supplies, printed documentation, SD card (8 GB), cables (USB 2.0 A to USB Type-C, USB Type-C to HDMI, USB Type-C to USB Type-C)

FLIR T540

Professional Thermal Camera

Diagnose potential faults in industrial, electrical, and mechanical systems, or discover temperature anomalies in R&D testing with the 464 × 348 resolution FLIR T540. This portable, ergonomic thermal camera offers advanced features like 1-Touch Level/Span and continuous laser-assisted autofocus, making it the perfect non-contact diagnostic tool for condition monitoring and research applications. Streamline electrical/mechanical surveys, troubleshooting, and repairs with Inspection Route mode, which runs pre-planned routes created in FLIR Thermal Studio Pro (Route Creator plugin required) so users can record temperature data and imagery in a logical sequence. The built-in Macro Mode allows R&D users to quickly switch from wide angle to close-up analysis without changing the lens. When coupled with Research Studio software, the T540 helps engineers assess unexpected hot spots and find potential design flaws. The T540 also features FLIR Ignite for automatic uploading of images directly from the camera to the cloud for easy, secure storage and sharing. The purchase of a T540 camera includes a 3-month subscription to FLIR Thermal Studio Pro and FLIR Route Creator.

FLIR T540

Professional Thermal Camera

MAKE CRITICAL DECISIONS QUICKLY

- Laser-assisted autofocus guarantees you'll get tack-sharp focus for accurate temperature readings that lead to quick but solid decisions

FLEXIBLE AND ERGONOMIC

- The T540's optical block rotates 180°, so you can image targets at any angle comfortably all day long.

INTUITIVE USER INTERFACE

- The capacitive touchscreen with intuitive menu is easy to navigate, plus you can customize with two programmable buttons.

FLIR T540

Professional Thermal Camera

	T530	T540
IR Resolution	320 x 240 (76,800 pixels)	464 x 348 (161,472 pixels)
UltraMax® Resolution	307,200 effective pixels	645,888 effective pixels
Object Temperature Range	-20°C to 120°C (-4°F to 248°F) 0°C to 650°C (32°F to 1202°F) Optional Calibration: 300°C to 1200°C (572°F to 2192°F)	-20°C to 120°C (-4°F to 248°F) 0°C to 650°C (32°F to 1202°F) 300°C to 1500°C (572°F to 2732°F)
Digital Zoom	1-4x continuous	1-6x continuous
Common Features		
Detector Type and Pitch	Uncooled microbolometer, 17 µm	
Thermal Sensitivity/NETD	<30 mK @ 30°C (42° lens)	
Spectral Range	7.5 - 14.0 µm	
Image Frequency	30 Hz	
Lens Identification	Automatic	
F-Number	f/1.1 (42° lens), f/1.3 (24° lens), f/1.5 (14° lens)	
Focus	Continuous with laser distance meter (LDM), one- shot LDM, one-shot contrast, manual	
Minimum Focus Distance	42° lens – 0.15 m 24° lens – 0.15 m; optional macro mode 14° lens – 1.0 m	
Macro Mode	24° lens option / 103 µm effective spotsize	24° lens option / 71 µm effective spotsize
Programmable Buttons	2	
Image Presentation and Modes		
Display	4”, 640 x 480 pixel touchscreen LCD with auto-rotation	
Digital Camera	5 MP, with built-in LED photo/video lamp	
Color Palettes	Iron, Gray, Rainbow, Arctic, Lava, Rainbow HC	
Image Modes	Infrared, visual, MSX®, Picture-in-Picture	
Picture-in-Picture	Resizable and movable	
UltraMax®	Quadruples pixel count; activated in menu and processed in FLIR Tools	
Measurement and Analysis		
Accuracy	±2°C (±3.6°F) or ±2% of reading	
Spotmeter and Area	3 ea. in live mode	
Measurement Presets	No measurement, center spot, hot spot, cold spot, User Preset 1, User Preset 2	
Laser Pointer	Yes	
Laser Distance Meter	Yes; dedicated button	
Annotations		
Voice	60 sec. recording added to still images or video via built-in mic (has speaker) or via Bluetooth	
Text	Predefined list or touchscreen keyboard	
Image Sketch	From touchscreen, on infrared image only	
Distance, Area Measurement	Yes; calculates area inside measurement box in m^2 or ft^2	
GPS	Automatic image tagging	
METERLiNK®	Yes	
Image Storage		
Storage Media	Removable SD card	
Image File Format	Standard JPEG with measurement data included	
Time Lapse (Infrared)	10 sec to 24 hrs	

Video Recording and Streaming	
Radiometric IR Video Recording	Real-time radiometric recording (.csq)
Non-Radiometric IR or Visual Video	H.264 to memory card
Radiometric IR Video Streaming	Yes, over UVC or Wi-Fi
Non-Radiometric IR Video Streaming	H.264 or MPEG-4 over Wi-Fi MJPEG over UVC or Wi-Fi
Communication Interfaces	USB 2.0, Bluetooth, Wi-Fi
Video Out	DisplayPort over USB Type-C
Additional Data	
Battery Type	Li-ion battery, charged in camera or on separate charger
Battery Operating Time	Approx. 4 hours at 25°C (77°F) ambient temperature and typical use
Operating Temperature Range	–15°C to 50°C (5°F to 122°F)
Storage Temperature Range	–40°C to 70°C (-40°F to 158°F)
Shock/Vibration/ Encapsulation; Safety	25 g / IEC 60068-2-27, 2 g / IEC 60068-2-6 / IP 54; EN/UL/CSA/PSE 60950-1
Weight/Dimensions w/o Lens	1.3 kg (2.9 lbs), 140 x 201 x 84 mm (5.5 x 7.9 x 3.3 in)
Box Contents	
Packaging	Infrared camera with lens, 2 batteries, battery charger, hard transport case, lanyards, front lens cap, power supplies, printed documentation, SD card (8 GB), cables (USB 2.0 A to USB Type-C, USB Type-C to HDMI, USB Type-C to USB Type-C)

FLIR T560

Professional Thermal Camera

Troubleshoot hot spots, find hidden faults, and confirm repairs quickly with the ergonomic, high-resolution FLIR T560. This 640 × 480 (307,200 pixel) thermal imaging camera has a bright 4" LCD and a 180° rotating lens platform, so you can easily and comfortably diagnose electrical or mechanical issues, even in hard-to-reach areas. Advanced on-camera measurement tools such as 1-Touch Level/Span, plus laser-assisted autofocus, ensure you'll record accurate temperature measurements every time. With on-board FLIR Inspection Route mode, you can download and run survey plans to your camera from FLIR Thermal Studio Pro (with FLIR Route Creator plugin). Together these systems will help you record temperature data and imagery in a logical sequence for faster troubleshooting and repair. The T560 also features FLIR Ignite for automatic uploading of images directly from the camera to the cloud for easy, secure storage and sharing. The purchase of a T560 camera includes a 3-month subscription to FLIR Thermal Studio Pro and FLIR Route Creator

FLIR T560

Professional Thermal Camera

MAKE CRITICAL DECISIONS QUICKLY

- Laser-assisted autofocus guarantees you'll get tack-sharp focus for accurate temperature readings that lead to quick but solid decisions

FLEXIBLE AND ERGONOMIC

- The T560's optical block rotates 180°, so you can image targets at any angle comfortably all day long.

IMPROVE WORKFLOW EFFICIENCIES

- Plan inspections in FLIR Thermal Studio Pro and load into a T560 with the FLIR Inspection Route camera option to streamline surveys and better manage critical data. Activate FLIR Ignite for automatic image uploads directly from the camera to the cloud for efficient and secure storage and sharing.

FLIR T560

Professional Thermal Camera

General	T530	T540	T560
IR resolution	320 × 240 (76,800 pixels)	464 × 348 (161,472 pixels)	640 × 480 (307,200 pixels)
UltraMax® resolution	307,200 effective pixels	645,888 effective pixels	1.2 MP effective pixels
Object temperature range	-20°C to 120°C (-4°F to 248°F) 0°C to 650°C (32°F to 1202°F) Optional Calibration: 300°C to 1200°C (572°F to 2192°F)	-20°C to 120°C (-4°F to 248°F) 0°C to 650°C (32°F to 1202°F) 300°C to 1200°C (572°F to 2192°F)	-20°C to 120°C (-4°F to 248°F) 0°C to 650°C (32°F to 1202°F) 300°C to 1500°C (572°F to 2732°F)"
Minimum focus distance	42° lens: 0.3 m (.98 ft) 24° lens: 0.5 m (1.64 ft); optional macro mode 14° lens: 1.0 m (3.28 ft)		42° lens: 0.15 m (0.49 ft) 24° lens: 0.15 m (0.49 ft); optional macro mode 14° lens: 1.0 m (3.28 ft)
Detector type and pitch	Uncooled microbolometer, 17 µm		Uncooled microbolom- eter, 12 µm
Digital zoom	1-4x continuous	1-6x continuous	1-8x continuous
Common Features			
Thermal sensitivity/NETD	<30 mK @ 30°C/86°F (42° lens)		
Spectral range	7.5 - 14.0 µm		
Image frequency	30 Hz		
Lens identification	Automatic		
F-number	f/1.1 (42° lens), f/1.3 (24° lens), f/1.5 (14° lens)		
Focus	Continuous with laser distance meter (LDM), one-shot LDM, one-shot contrast, manual		
Programmable buttons	2		
Image Presentation and Modes			
Display	4", 640 × 480 pixel touchscreen LCD with auto-rotation		
Digital camera	5 MP, with built-in LED photo/video lamp		
Color palettes	Iron, Gray, Rainbow, Arctic, Lava, Rainbow HC		
Image modes	Infrared, visual, MSX®, Picture-in-Picture		
Picture-in-picture	Resizable and movable		
UltraMax	Super-resolution process quadruples pixel count; activated in menu and processed in reporting software		
Measurement and Analysis			
Accuracy, full range	±2°C (±3.6°F) or ±2% of reading		
Spotmeter and area	3 ea. in live mode		
Measurement presets	No measurement, center spot, hot spot, cold spot, User Preset 1, User Preset 2		

Annoatations	
Inspection routing	Camera firmware option; file created in FLIR Thermal Studio Pro using FLIR Route Creator plug-in
Voice	60 sec. recording added to still images or video via built-in mic (has speaker) or via Bluetooth
Text	Predefined list or touchscreen keyboard
Image sketch	From touchscreen, on infrared image only
Distance, area measurement	Yes; calculates area inside measurement box in m2 or ft2
METERLiNK	Yes
Compass, GPS	Yes; automatic GPS image tagging
Communications & Connections	
Cloud services (via Wi-Fi)	FLIR Ignite for direct, secure image uploading, organizing, and sharing
METERLiNK (via Bluetooth)	Wireless conection to FLIR meters with METERLiNK
Image Storage	
Storage	Removable SD card; onboard FLIR Ignite cloud connectivity with Wi-Fi
Image file format	Standard JPEG with measurement data included
Timelapse (Infrared)	10 sec to 24 hrs
Video Recording and Streaming	
Radiometric IR video recording	Real-time radiometric recording (.csq)
Non-radiometric IR or visual video	H.264 to memory card
Radiometric IR video streaming	Yes, over UVC or Wi-Fi
Non-radiometric IR video streaming	H.264 or MPEG-4 over Wi-Fi MJPEG over UVC or Wi-Fi
Communication interfaces	USB 2.0, Bluetooth, Wi-Fi
Video out	DisplayPort over USB Type-C
Additional Data	
Battery type	Li-ion battery, charged in camera or on separate charger
Battery operating Time	Approx. 4 hours at 25°C (77°F) ambient temperature and typical use
Operating temperature range	-15°C to 50°C (5°F to 122°F)
Shock/vibration/ encapsulation/ safety	25 g / IEC 60068-2-27, 2 g / IEC 60068-2-6 / IP 54; EN/UL/CSA/PSE 60950-1
Weight/dimensions without lens	1.3 kg (2.9 lbs), 140 × 201 × 84 mm (5.5 × 7.9 × 3.3 in)

Specifications are subject to change without notice. For the most up-to-date specifications, visit www.teledyneflir.com.

Based on template T403467 Rev 3.2 2022-02-08

FLIR T840

High Performance Thermal Imaging Camera

The FLIR T840 infrared (IR) camera is designed to help electric utility and other thermography professionals comfortably survey equipment both indoors or outdoors and seek out signs of failure all day long. Thanks to an integrated eyepiece viewfinder and a bright 4-inch color LCD display, the T840 makes it easy to conduct inspections outside in bright, challenging lighting conditions. The 180° rotating lens platform and thoughtful ergonomic design allow the T840 to help users diagnose hard-to-reach components in a variety of environments. With advanced on-camera measurement tools such as 1-Touch Level/Span and laser-assisted autofocus, you'll record accurate temperature measurements every time. Avoid costly power outages and plant shutdowns through regular predictive maintenance routines with this flexible and innovative IR camera.

FLIR T840

High Performance Thermal Imaging Camera

AVOID COSTLY OUTAGES

Safely and comfortably assess equipment and prevent component failure from any vantage point, in any lighting condition

- Scan outdoor equipment from a safe distance using the integrated eyepiece viewfinder
- Reduce the strain of full-day inspections with the 180° rotating optical block
- Share lenses across your fleet of cameras thanks to AutoCal™ optics
- Ensure crisp thermal imagery and spot-on temperature readings every time with laser assisted autofocus

QUICKLY MAKE CRITICAL DECISIONS

Advanced imaging technology and superior sensitivity help you make the right call – fast

- Get industry-leading image clarity from FLIR Vision Processing™, MSX®, UltraMax®, and proprietary adaptive filtering
- Determine accessibility of components for repair at the touch of a button by activating on-screen laser distance measurement
- See problems and make decisions easily thanks to a scratch-resistant, 4-inch LCD display that's 33% brighter and 4x the resolution of comparable cameras

MAKE YOUR WORK EASIER

Get the most out of your workday with rapid reporting features that help you organize findings in the field

- Quickly access menus, folders, and settings using intuitive controls, including rapid response touchscreen
- Allow customers to observe critical findings in real time through Wi-Fi streaming to the FLIR Tools® app
- Prepare precise documentation with embedded GPS locations, as well as measurement data from METERLiNK®-enabled FLIR clamps and multimeters

FLIR T840

High Performance Thermal Imaging Camera

T840	
Eyepiece Viewfinder	Yes
IR Resolution	464 x 348 (161,472 pixels)
UltraMax® Resolution	645,888 effective pixels
Object Temperature Range	-20°C to 120°C (-4°F to 248°F) 0°C to 650°C (32°F to 1202°F) 300°C to 1500°C (572°F to 2732°F)
Digital Zoom	1-6x continuous
Common Features	
Detector Type and Pitch	Uncooled microbolometer, 17 µm
Thermal Sensitivity/NETD	<30 mK @ 30°C (42° lens)
Spectral Range	7.5 - 14.0 µm
Image Frequency	30 Hz
Lens Identification	Automatic
F-Number	f/1.1 (42° lens), f/1.3 (24° lens), f/1.5 (14° lens), f/1.35 (6° lens)
Focus	Continuous with laser distance meter (LDM), oneshot LDM, one-shot contrast, manual
Minimum Focus Distance	42° lens – 0.15 m 24° lens – 0.15 m; optional macro mode 14° lens – 1.0 m 6° lens – 5.0 m
Macro Mode	24° lens option / 71 µm effective spot size
Programmable Buttons	2
Image Presentation and Modes	
Display	4-inch, 640 x 480 pixel touchscreen LCD with auto-rotation
Digital Camera	5 MP, with built-in LED photo/video lamp
Color Palettes	Iron, Gray, Rainbow, Arctic, Lava, Rainbow HC
Image Modes	Infrared, visual, MSX®, Picture-in-Picture
Picture-in-Picture	Resizable and movable
UltraMax®	Quadruples pixel count; activated in menu and processed in FLIR Tools

Measurement and Analysis	
Accuracy	±2°C (±3.6°F) or ±2% of reading
Spotmeter and Area	3 each in live mode
Measurement Presets	No measurement, center spot, hot spot, cold spot, User Preset 1, User Preset 2
Laser Pointer	Yes
Laser Distance Meter	Yes; dedicated button
Annotations	
Voice	60 sec. recording added to still images or video via built- in mic (has speaker) or via Bluetooth
Text	Predefined list or touchscreen keyboard
Image Sketch	From touchscreen, on infrared image only
Distance, Area Measurement	Yes; calculates area inside measurement box in m^2 or ft^2
GPS	Automatic image tagging
METERLiNK®	Yes
Image Storage	
Storage Media	Removable SD card
Image File Format	Standard JPEG with measurement data included
Time Lapse (Infrared)	10 sec to 24 hrs
Video Recording and Streaming	
Radiometric IR Video Recording	Real-time radiometric recording (.csq)
Non-Radiometric IR or Visual Video	H.264 to memory card
Radiometric IR Video Streaming	Yes, over UVC or Wi-Fi
Non-Radiometric IR Video Streaming	H.264 or MPEG-4 over Wi-Fi MJPEG over UVC or Wi-Fi
Communication Interfaces	USB 2.0, Bluetooth, Wi-Fi
Video Out	DisplayPort over USB Type-C
Additional Data	
Battery Type	Li-ion battery, charged in camera or on separate charger
Battery Operating Time	Approximately 4 hours at 25°C (77°F) ambient temperature and typical use
Operating Temperature Range	-15°C to 50°C (5°F to 122°F)
Storage Temperature Range	-40°C to 70°C (-40°F to 158°F)
Shock/Vibration/Encapsulation; Safety	25 g / IEC 60068-2-27, 2 g / IEC 60068-2-6 / IP54; EN/UL/CSA/PSE 60950-1

FLIR T860

High Performance Thermal Imaging Camera

FLIR T860 thermal imaging cameras provide a noncontact inspection method with a tilting optic design, making it easy to safely and comfortably assess the condition of critical electrical and mechanical equipment. Advanced features such as 1-Touch Level/Span contrast enhancement and sharp laser-assisted autofocus ensure the camera takes accurate temperature measurements every time. Plus, the T860 offers temperature measurement accuracy as good as ±1°C / ±1% to help professionals make decisions quickly. T860 camera is compatible with FLIR AutoCal™ interchangeable lenses, for simplified transition from scanning wide areas with the 42° lens to inspecting distant targets with the 6° telephoto lens. Adding a FLIR T860 camera to a condition monitoring/predictive maintenance program can help reduce maintenance costs, improve system efficiency and reliability, and prevent lost production and downtime due to outages.

FLIR T860

High Performance Thermal Imaging Camera

IMPROVE WORKFLOW EFFICIENCIES

Collect and manage critical data quickly and easily

- Develop and download routes to the camera via FLIR Route Creator* for streamlined inspections of critical assets
- Acquire temperature data and thermal and visual imagery in a logical sequence for faster preventative/predictive maintenance procedures
- Automate data management and reporting through easy transfer of organized files to FLIR Thermal Studio*

WORK SAFELY AND COMFORTABLY

Assess the state of equipment from a safe distance, at any angle, or in any lighting condition

- Use the camera in any environment – indoors or out – with a large, vibrant 4-inch color LCD display and an integrated eyepiece viewfinder for working in bright sunlight
- Image targets overhead or down low without strain thanks to the 180° rotating optical block and ergonomic design
- Accurately measure small targets over long distances or in large scenes by pairing the high-resolution IR sensor with the optional 6° telephoto lens

MAKE CRITICAL DECISIONS QUICKLY

Save time and share data faster to increase in-field efficiency

- Ensure precision measurement with laser- assisted autofocus, 1-Touch Level/Span, and exceptional temperature accuracy†
- Avoid diagnostic errors with industry-leading image clarity from FLIR Vision Processing™, combining MSX®, UltraMax®, and proprietary adaptive filtering algorithms
- Optimize workflows with reporting features such as built-in voice annotation, customizable work folders, and Wi-Fi sync to FLIR mobile apps

FLIR T860

High Performance Thermal Imaging Camera

Imaging and Optical Data	T840	T860	T865
IR Resolution	464 × 348 (161,472 pixels, 645,888 with UltraMax®)	640 × 480 (307,200 pixels, 1,228,800 with UltraMax®)	640 × 480 (307,200 pixels, 1,228,800 with UltraMax®)
Detector Pitch	17 µm	12 µm	12 µm
Object Temperature Range	-20°C to 120°C (-4°F to 248°F); 0°C to 650°C (32°F to 1202°F); 300°C to 1500°C (572°F to 2732°F)	-20°C to 120°C (-4°F to 248°F); 0°C to 650°C (32°F to 1202°F); 300°C to 2000°C (572°F to 3632°F)	-40°C to 120°C (-40°F to 248°F); 0°C to 650°C (32°F to 1202°F); 300°C to 2000°C (572°F to 3632°F)
Digital Zoom	1-6× continuous	1-8× continuous	1-8× continuous
Macro Mode (24° lens option)	71 µm min. focus distance	50 µm min. focus distance	50 µm min. focus distance
Spotmeter and Area	3 each in live mode	3 each in live mode	10 and 5 in live mode
Accuracy	±2°C (±3.6°F): -20°C to 100°C (-4°F to 212°F); ±2%: 100°C to 650°C (212°F to 1202°F), 300°C to 1500°C (572°F to 2732°F)	±2°C (±3.6°F): -20°C to 100°C (-4°F to 212°F); ±2%: 100°C to 650°C (212°F to 1202°F), 300°C to 2000°C (572°F to 3632°F); ±3%: 1800°C to 2000°C (3272°F to 3632°F) with 42° lens	±1°C (±1.8°F): 5°C to 100°C (41°F to 212°F); ±1%: 100°F to 120°C (212°F to 248°F); ±2°C (±3.6°F): -40°C to 100°C (-40°F to 212°F); ±2%: 100°C to 650°C (212°F to 1202°F), 300°C to 2000°C (572°F to 3632°F); ±3%: 1800°C to 2000°C (3272°F to 3632°F) with 42° lens
Detector Data			
Detector Type and Pitch	Uncooled microbolometer		
Thermal Sensitivity/ NETD	<30 mK @ 30°C (42° lens)		
Spectral Range	7.5 to 14.0 µm		
Image Frequency	30 Hz		
Lens Identification	Automatic		
F-number	f/1.1 (42° lens), f/1.3 (24° lens), f/1.5 (14° lens), f/1.35 (6° lens)		
Focus	Continuous with laser distance meter (LDM), One-shot LDM, One-shot contrast, manual		
Minimum Focus Distance	42° lens: 0.15 m/0.49 ft, 24° lens: 0.15 m/0.49 ft, 14° lens: 1.0 m/3.28 ft, 6° lens: 5.0 m/16.4 ft		
Programmable Buttons	2		
Image Presentation			
Display	4-inch, 640 × 480 pixel touchscreen LCD with auto-rotation		
Digital Camera	5 MP with built-in LED photo/video lamp		
Color Palettes	Iron, Rainbow, Rainbow HC, White hot, Black hot, Arctic, Lava		
Image Modes	Infrared, visual, MSX®, Picture-in-picture		
Picture-in-Picture	Resizable and movable		
UltraMax®	Activated in menu and processed in FLIR reporting software		
Measurement and Analysis			
Measurement Presets	No measurement, Center spot, Hot spot, Cold spot, UserPreset 1, User Preset 2		
Laser Pointer	Yes		
Laser Distance Meter	Yes; dedicated button, displays distance on-screen		
On-screen Area Measurement	Yes; calculates area inside measurement box in m² or ft²		

Annotations	
FLIR Inspection Route	Enabled in the camera
Voice	60 sec. recording added to still images or video via built-in mic (has speaker) or via Bluetooth®
Text	Predefined list or touchscreen keyboard
Image Sketch	Infrared images only, from touchscreen
GPS	Automatic image tagging
METERLiNK®	Yes; connects to METERLiNK-enabled FLIR meters
Image Storage	
Storage Media	Removable SD card
Image File Format	Standard JPEG with measurement data included
Time Lapse (Infrared)	10 sec to 24 hrs
Video Recording and Streaming	
Radiometric IR Video Recording	Real-time radiometric recording (.csq)
Non-radiometric IR or Visual Video	H.264 to memory card
Radiometric IR Video Streaming	Compressed, over UVC
Non-radiometric IR Video Streaming	H.264, MPEG-4 over Wi-Fi; MJPEG over UVC or Wi-Fi
Communication Interfaces	USB 2.0, Bluetooth, Wi-Fi, DisplayPort
Video Out	DisplayPort
Additional Data	
Languages	21
Battery Type	Li-ion battery, charged in camera or on separate charger
Battery Operation	Approximately 4 hours at 25°C (77°F)
Operating Temperature Range	-15°C to 50°C (5°F to 122°F)
Shock/Vibration/ Encapsulation	25 g (IEC 60068-2-27) / 2 g (IEC 60068-2-6) / IP54 EN/UL/CSA/ PSE 60950-1
Safety	EN/UL/CSA/PSE 60950-1
Weight (including battery)	1.4 kg (3.1 lb)
Size (l × w × h, lens vertical)	164.3 × 201.3 × 84.1 mm (6.5 × 7.9 × 3.3 in)
Box Contents	
Package Contents	Infrared camera with lens, small viewfinder eyecup, 2-rechargeable batteries, battery charger, hard transport case, lanyards, front lens cap, power supplies, printed documentation, SD card (8 GB), cables (USB 2.0 A to USB Type-C, USB Type-C to HDMI, USB Type-C to USB Type-C), License card: FLIR Thermal Studio Pro (3-month subscription) + FLIR Route Creator Plugin for Thermal Studio Pro*

FLIR T865

High Performance Thermal Imaging Camera

The FLIR T865 thermal imaging camera is a non-contact inspection tool with 180° rotating optical block that allows users to safely and comfortably assess the condition of critical electrical and mechanical equipment in utility and manufacturing applications. With advanced features including unmatched temperature measurements down to -40°C, accuracy as good as 1°C/1%, 1-Touch Level/Span contrast enhancement, and laser–assisted autofocus, you'll get highly accurate temperature measurements every time. Pair the T865 with a 6 FOV IR lens to perform inspections on small targets from long distances. The on-board Inspection Route system helps you record temperature data and imagery in a logical sequence for faster troubleshooting and repair. The T865 also features FLIR Ignite for automatic uploading of images directly from the camera to the cloud for easy, secure storage and sharing. Adding a FLIR T865 camera to a condition monitoring/predictive maintenance program can help reduce maintenance costs, improve system efficiency and reliability, and prevent downtime due to outages.

FLIR T865

High Performance Thermal Imaging Camera

IMPROVE WORKFLOW EFFICIENCIES

Collect and manage critical data quickly and easily

- Develop and download routes to the camera via FLIR Route Creator* for streamlined inspections of critical assets
- Acquire temperature data and thermal and visual imagery in a logical sequence for faster preventative/predictive maintenance procedures
- Automate data management and reporting through easy transfer of organized files to FLIR Thermal Studio*

WORK SAFELY AND COMFORTABLY

Assess the state of equipment from a safe distance, at any angle, or in any lighting condition

- Use the camera in any environment – indoors or out – with a large, vibrant 4-inch color LCD display and an integrated eyepiece viewfinder for working in bright sunlight
- Image targets overhead or down low without strain thanks to the 180° rotating optical block and ergonomic design
- Accurately measure small targets over long distances or in large scenes by pairing the high-resolution IR sensor with the optional 6° telephoto lens

MAKE CRITICAL DECISIONS QUICKLY

Save time and share data faster to increase in-field efficiency

- Ensure precision measurement with laser- assisted autofocus, 1-Touch Level/Span, and exceptional temperature accuracy†
- Avoid diagnostic errors with industry-leading image clarity from FLIR Vision Processing™, combining MSX®, UltraMax®, and proprietary adaptive filtering algorithms
- Optimize workflows with reporting features such as built-in voice annotation, customizable work folders, and Wi-Fi sync to FLIR mobile apps

FLIR T865

High Performance Thermal Imaging Camera

Imaging and Optical Data	T840	T860	T865
IR Resolution	464 × 348 (161,472 pixels, 645,888 with UltraMax®)	640 × 480 (307,200 pixels, 1,228,800 with UltraMax®)	640 × 480 (307,200 pixels, 1,228,800 with UltraMax®)
Detector Pitch	17 µm	12 µm	12 µm
Object Temperature Range	-20°C to 120°C (-4°F to 248°F); 0°C to 650°C (32°F to 1202°F); 300°C to 1500°C (572°F to 2732°F)	-20°C to 120°C (-4°F to 248°F); 0°C to 650°C (32°F to 1202°F); 300°C to 2000°C (572°F to 3632°F)	-40°C to 120°C (-40°F to 248°F); 0°C to 650°C (32°F to 1202°F); 300°C to 2000°C (572°F to 3632°F)
Digital Zoom	1-6× continuous	1-8× continuous	1-8× continuous
Macro Mode (24° lens option)	71 µm min. focus distance	50 µm min. focus distance	50 µm min. focus distance
Spotmeter and Area	3 each in live mode	3 each in live mode	10 and 5 in live mode
Accuracy	±2°C (±3.6°F): -20°C to 100°C (-4°F to 212°F); ±2%: 100°C to 650°C (212°F to 1202°F), 300°C to 1500°C (572°F to 2732°F)	±2°C (±3.6°F): -20°C to 100°C (-4°F to 212°F); ±2%: 100°C to 650°C (212°F to 1202°F), 300°C to 2000°C (572°F to 3632°F); ±3%: 1800°C to 2000°C (3272°F to 3632°F) with 42° lens	±1°C (±1.8°F): 5°C to 100°C (41°F to 212°F); ±1%: 100°F to 120°C (212°F to 248°F); ±2°C (±3.6°F): -40°C to 100°C (-40°F to 212°F); ±2%: 100°C to 650°C (212°F to 1202°F), 300°C to 2000°C (572°F to 3632°F); ±3%: 1800°C to 2000°C (3272°F to 3632°F) with 42° lens
Detector Data			
Detector Type and Pitch	Uncooled microbolometer		
Thermal Sensitivity/ NETD	<30 mK @ 30°C (42° lens)		
Spectral Range	7.5 to 14.0 µm		
Image Frequency	30 Hz		
Lens Identification	Automatic		
F-number	f/1.1 (42° lens), f/1.3 (24° lens), f/1.5 (14° lens), f/1.35 (6° lens)		
Focus	Continuous with laser distance meter (LDM), One-shot LDM, One-shot contrast, manual		
Minimum Focus Distance	42° lens: 0.15 m/0.49 ft, 24° lens: 0.15 m/0.49 ft, 14° lens: 1.0 m/3.28 ft, 6° lens: 5.0 m/16.4 ft		
Programmable Buttons	2		
Image Presentation			
Display	4-inch, 640 × 480 pixel touchscreen LCD with auto-rotation		
Digital Camera	5 MP with built-in LED photo/video lamp		
Color Palettes	Iron, Rainbow, Rainbow HC, White hot, Black hot, Arctic, Lava		
Image Modes	Infrared, visual, MSX®, Picture-in-picture		
Picture-in-Picture	Resizable and movable		
UltraMax®	Activated in menu and processed in FLIR reporting software		
Measurement and Analysis			
Measurement Presets	No measurement, Center spot, Hot spot, Cold spot, UserPreset 1, User Preset 2		
Laser Pointer	Yes		
Laser Distance Meter	Yes; dedicated button, displays distance on-screen		
On-screen Area Measurement	Yes; calculates area inside measurement box in m² or ft²		

Annotations	
FLIR Inspection Route	Enabled in the camera
Voice	60 sec. recording added to still images or video via built-in mic (has speaker) or via Bluetooth®
Text	Predefined list or touchscreen keyboard
Image Sketch	Infrared images only, from touchscreen
GPS	Automatic image tagging
METERLiNK®	Yes; connects to METERLiNK-enabled FLIR meters
Image Storage	
Storage Media	Removable SD card
Image File Format	Standard JPEG with measurement data included
Time Lapse (Infrared)	10 sec to 24 hrs
Video Recording and Streaming	
Radiometric IR Video Recording	Real-time radiometric recording (.csq)
Non-radiometric IR or Visual Video	H.264 to memory card
Radiometric IR Video Streaming	Compressed, over UVC
Non-radiometric IR Video Streaming	H.264, MPEG-4 over Wi-Fi; MJPEG over UVC or Wi-Fi
Communication Interfaces	USB 2.0, Bluetooth, Wi-Fi, DisplayPort
Video Out	DisplayPort
Additional Data	
Languages	21
Battery Type	Li-ion battery, charged in camera or on separate charger
Battery Operation	Approximately 4 hours at 25°C (77°F)
Operating Temperature Range	-15°C to 50°C (5°F to 122°F)
Shock/Vibration/ Encapsulation	25 g (IEC 60068-2-27) / 2 g (IEC 60068-2-6) / IP54 EN/UL/CSA/ PSE 60950-1
Safety	EN/UL/CSA/PSE 60950-1
Weight (including battery)	1.4 kg (3.1 lb)
Size (l × w × h, lens vertical)	164.3 × 201.3 × 84.1 mm (6.5 × 7.9 × 3.3 in)
Box Contents	
Package Contents	Infrared camera with lens, small viewfinder eyecup, 2-rechargeable batteries, battery charger, hard transport case, lanyards, front lens cap, power supplies, printed documentation, SD card (8 GB), cables (USB 2.0 A to USB Type-C, USB Type-C to HDMI, USB Type-C to USB Type-C), License card: FLIR Thermal Studio Pro (3-month subscription) + FLIR Route Creator Plugin for Thermal Studio Pro*

FLIR Txxx Accessories

 Lens Case (T300437ACC)	 Battery (T199300ACC)	 Battery Charger (T199425ACC)	 Power Supply for Battery Charger (T911633ACC)
 Mounting KIT (T300369)	 HDMI Splitter (T911998)	 USB 2.0 A to USB Type-C cable (T911631ACC)	 USB Type-C to USB Type-C cable (T911705ACC)
 6° Lens with case (T300095)	 14° Lens with case (T199588)	 24° Lens with case (T199589)	 42° Lens with case (T199590)
 FLIR Macro Lens 2.0x with Case (T300238)	 Remote operation button (T131171ACC)	 Tripod (T911997)	 Car adapter 12V (T911706ACC)
 Hard transport case (T199347ACC)	 Power Supply (T911630ACC)	 HDMI Splitter (T911998)	 USB 2.0 A to USB Type-C with Power supply (T911846ACC)

FLIR Stand-Alone Software

FLIR Thermal Studio Standard, 1 Year Subscription
P/N: T300341

FLIR Thermal Studio Standard, Perpetual license
P/N: T300258

FLIR Thermal Studio Pro, 1 Year Subscription
P/N: T300243

FLIR Thermal Studio Pro, Perpetual license
P/N: T300083

FLIR Route Creator Plugin for FLIR Thermal Studio Pro, 1 Year Subscription
P/N: T300244

FLIR Route Creator Plugin for FLIR Thermal Studio Pro, Perpetual license
P/N: T300439

Clamp Meters

FLIR CM275
IGM™ Clamp Meter with Datalogging (Wireless)

301-00-819

FLIR CM74
True RMS Clamp Meter with VFD mode

300-50-142

FLIR CM72
True RMS Clamp Meter

300-50-141

FLIR CM85
True RMS Power Clamp (Wireless)

301-25-608

FLIR CM83
True RMS Power Clamp (Wireless)

110-81-519

FLIR CM82
True RMS Power Clamp

FLIR CM78
1000 Amp Clamp with IR Thermometer

110-81-518

FLIR CM57 /CM55
Flexible Clamp Meter

301-25-607

FLIR CM46
True RMS Clamp Meter with DC Current

301-25-606

FLIR CM44
True RMS Clamp Meter with Accu-Tip™

301-25-605

FLIR CM42
True RMS Clamp Meter

301-25-604

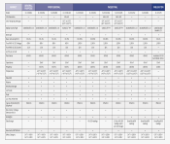
Accessories

FLIR CM94
2000 A AC/DC Utility Clamp Meter

301-60-831

FLIR CM65
True RMS 600 A Solar Clamp Meter)

301-60-830



Comparison Guide

FLIR CM275

IGM™ Clamp Meter with Datalogging (Wireless)

The FLIR CM275 clamp meter combines thermal imaging with electrical measurement into powerful inspection, troubleshooting, and diagnostic tools. Through Infrared Guided Measurement (IGM), the CM275 provides a reliable way to identify hot spots and overloaded circuits from a safe distance. Confirm your findings with the clamp meter's wide range of functions plus temperature readings. The FLIR CM275 also provides wireless connectivity to upload images or data to the FLIR Tools™ app.

FLIR CM275

IGM™ Clamp Meter with Datalogging (Wireless)

TROUBLESHOOT FASTER, MORE SAFELY

- Quickly identify issues with IGM, without contact with panels, cabinets, or cluttered wires and cables that may present safety hazards.

VERIFY PROBLEMS, VALIDATE HOT SPOTS

- Get accurate amperage and voltage measurements and center-point temperature readings. Also features a large display for data and image viewing.

DOCUMENT AND SHARE RESULTS INSTANTLY

- Upload and organize electrical measurements and thermal images, share information with your team, and file reports while in the field.

FLIR CM275

IGM™ Clamp Meter with Datalogging (Wireless)

Thermal Imaging	CM275
IR Resolution	160 x 120 (19,200 pixels)
Thermal Imaging Detector	FLIR Lepton® microbolometer
Temperature Sensitivity	150 mK
Emissivity Settings	4 Presets with custom adjustment
Temperature Accuracy	3°C or 3%
Temperature Range	14°F to 302°F (-10°C to 150°C)
Field of View	50.0° x 38°
Laser Pointer	Yes
Focus	Fixed
Thermal Imaging Palette	Iron, Rainbow, Grayscale
Measurements-Both Models	
True RMS	Yes
Auto-ranging	Yes, with manual range option
	Basic Accuracy
AC / DC Volts	±1.0%
VFD AC Volts	±1.0%
AC / DC LoZ V	±1.0%
AC / DC Amps	±2.0%
VFD AC Amps	±2.0%
AC Inrush	±3.0%
Resistance	±1.0%
Capacitance	±1.0%
Diode Test	±1.5%
Flex Input AC A	±1.0%
Flex Input Frequency Counter	±0.1%

Additional Measurements	CM275
Continuity Check	30 Ω
Measuring Rate	3 samples per second
Min/Max	Yes
General Information	
Connectivity	Bluetooth®
Data Logging & Storage	10 sets of 40K scalar measurements, 100 images
Jaw Opening	35 mm (1.38 in) 1250 MCM
Auto Power Off	Yes
Worklights	Yes
Display Size	2.4 in TFT screen
Battery	3 AA batteries; optional TA04 Li-Poly rechargeable battery
Drop Test	2 m
Safety Category Rating	CAT III-1000V, CAT IV-600V
Size (H x W x L)	48.5 x 97 x 255 mm (1.9 x 3.8 x 10 in)
Weight	460 g (16 oz)
Warranty	10 year on product and detector
Box Contents	
	Clamp Meter, batteries, silicone test leads, soft carrying case

Ordering Information	Order #
FLIR CM275 Imaging Clamp Meter with Datalogging, Connectivity and IGM	793950372753

For a complete list of available accessories, go to: flir.com/store/instruments/testaccessories

ACCESSORIES

- TEST LEADS AND PROBES
  - CAT IV Insulated Alligator Probes (TA70)
  - CAT IV Silicone Test Leads (TA80)
- CASES AND POUCHES
  - Protective Case (TA11)
  - Pouch for Clamp Meters [TA17]
  - Universal Soft Sided Case (TA15)
  - Protective Case for DM9x & TA72/74 Series (TA10-F)
- BATTERIES AND POWER
  - NiMH Rechargeable Battery Kit (TA04-KIT)
- MOUNTS AND HOUSINGS
  - Magnetic Meter Mount (TA52)
- STRAPS AND HOLSTERS
  - Belt Clip (TA42)
- Universal Flex Current Probe
  - FLIR TA72
  - FLIR TA74

FLIR CM74

True RMS Clamp Meter with VFD mode

The FLIR CM74 clamp meter gives you better access to wiring in hard-to-reach places. Made with a narrow jaw and high-powered LED worklights, the meter makes it easier to take measurements in dark, crowded panels and cabinets. It's compact and light to carry in your pocket wherever you go. The CM74 offers advanced features including AC/DC measurement, Auto ranging, True RMS, Inrush, VFD Mode, and more–everything you need to stay competitive and ensure accurate readings.

FLIR CM74

True RMS Clamp Meter with VFD mode

LIGHTWEIGHT AND NARROW CLAMP JAW

- The light and compact meter is convenient to carry and designed to easily access wiring in crowded panels or cabinets.

ALL THE FEATURES YOU NEED

- Tackle modern challenges and get accurate readings with advanced electrical features including True RMS, LoZ, VFD Mode, Inrush, and more.

BUILT TO LAST

- Built rugged with double-molded hand grips to reduce slippage, a large-digit LCD display, and a bright backlight.

FLIR CM74

True RMS Clamp Meter with VFD mode

CM74		
Technical Summary	**MAX Range**	**Basic Accuracy**
DC Voltage	1000V	±1.0%
AC Voltage	1000V	±1.0%
VFD AC Voltage	1000V	±1.0%
LoZ Mode AC Voltage	1000V	±1.0%
LoZ Mode DC Voltage	1000V	±1.0%
DC Current	600.0A	±2.0%
AC Current	600.0A	±2.0%
VFD AC Current	600.0A	±2.0%
Inrush AC Current	600.0A	±3.0%
Inrush Current threshold	Min 0.5A, Integration Time 100ms	
Frequency	60.00kHz	±0.1%
Resistance	6000Ω	±1.0%
Continuity	600.0Ω	±1.0%
Capacitance	1000µF	±1.0%
Diode	1.5V	±1.5%
General Information		
Display Counts	6,000	
Jaw Opening	1.38" (35mm), 1250MCM	
Category Rating	CAT IV-600V, CAT III-1000V	
Certifications	UL	
Battery Type	4 x AAA	
Warranty	Limited Lifetime	
Includes	Clamp Meter, 4 x AAA Batteries, Premium Silicone Test Leads, Quick Start, User Manual (CD), Extended Warranty Registration Card	

ACCESSORIES

- TEST LEADS AND PROBES
  - CAT IV Insulated Alligator Probes (TA70)
  - CAT IV Silicone Test Leads (TA80)
- CASES AND POUCHES
  - Protective Case (TA11)
  - Pouch for Clamp Meters [TA17]
  - Universal Soft Sided Case (TA15)
- BATTERIES AND POWER
  - NiMH Rechargeable Battery Kit (TA03-KIT)
- MOUNTS AND HOUSINGS
  - Magnetic Meter Mount (TA52)
- STRAPS AND HOLSTERS
  - Belt Clip (TA42)
- Universal Flex Current Probe
  - FLIR TA72
  - FLIR TA74

FLIR CM72

True RMS Clamp Meter

The FLIR CM72 clamp meter gives you better access to wiring in hard-to-reach places. Made with a narrow jaw and high-powered LED worklights, the meter makes it easier to take measurements in dark, crowded panels and cabinets. It’s compact and light to carry in your back pocket wherever you go. The CM72 features AC measurement, Auto ranging, True RMS, and more, to help you stay competitive and ensure accurate readings.

FLIR CM72

True RMS Clamp Meter

LIGHTWEIGHT AND NARROW CLAMP JAW

- The light and compact meter is convenient to carry and designed to easily access wiring in crowded panels or cabinets.

ALL THE FEATURES YOU NEED

- Tackle modern challenges and get accurate readings with advanced electrical features including True RMS, LoZ, and Smart Diode with Disable.

BUILT TO LAST

- Built rugged with double-molded hand grips to reduce slippage, a large-digit LCD display, and a bright backlight.

FLIR CM72

True RMS Clamp Meter

CM72		
Technical Summary	**MAX Range**	**Basic Accuracy**
DC Voltage	600.0V	±1.0%
AC Voltage	600.0V	±1.0%
VFD AC Voltage	-	±1.0%
LoZ Mode AC Voltage	600.0V	±1.0%
LoZ Mode DC Voltage	600.0V	±1.0%
DC Current	-	±2.0%
AC Current	600.0A	±2.0%
VFD AC Current	600.0A	±2.0%
Inrush AC Current	-	±3.0%
Inrush Current threshold	-	
Frequency	60.00kHz	±0.1%
Resistance	6000Ω	±1.0%
Continuity	600.0Ω	±1.0%
Capacitance	1000µF	±1.0%
Diode	1.5V	±1.5%
General Information		
Display Counts	6,000	
Jaw Opening	1.38" (35mm), 1250MCM	
Category Rating	CAT IV-600V, CAT III-1000V	
Certifications	UL	
Battery Type	4 x AAA	
Warranty	Limited Lifetime	
Includes	Clamp Meter, 4 x AAA Batteries, Premium Silicone Test Leads, Quick Start, User Manual (CD), Extended Warranty Registration Card	

ACCESSORIES

- TEST LEADS AND PROBES
  - CAT IV Insulated Alligator Probes (TA70)
  - CAT IV Silicone Test Leads (TA80)
- CASES AND POUCHES
  - Protective Case (TA11)
  - Pouch for Clamp Meters [TA17]
  - Universal Soft Sided Case (TA15)
- BATTERIES AND POWER
  - NiMH Rechargeable Battery Kit (TA03-KIT)
- MOUNTS AND HOUSINGS
  - Magnetic Meter Mount (TA52)
- STRAPS AND HOLSTERS
  - Belt Clip (TA42)
- Universal Flex Current Probe
  - FLIR TA72
  - FLIR TA74

FLIR CM85

True RMS Clamp Meter (Wireless)

The FLIR CM85 is an industrial power clamp meter with advanced power analysis and variable frequency drive (VFD) filtering functions required by electrical troubleshooters for full-scale equipment. The CM85 helps users accurately analyze voltage in complex machinery by including harmonics, inrush, current, and phase rotation testing. The meter also features Bluetooth® for remote viewing and data sharing from compatible mobile devices, and METERLiNK technology to wirelessly embed readings into infrared images on compatible FLIR cameras.

FLIR CM85

True RMS Clamp Meter (Wireless)

SUPERIOR ACCURACY

- The True RMS clamp meters provide VFD Mode for superior accuracy while working on VFD-controlled equipment, and advanced power efficiency and harmonics measurements enable system-level performance analysis.

RELIABLE PERFORMANCE

- Features Inrush mode to capture AC Current spikes during start-up, and phase-rotation testing to ensure motor and power source alignment.

VIEW DATA REMOTELY, SHARE INSTANTLY

- View readings from your mobile device via Bluetooth; METERLiNK technology wirelessly embeds data into thermal images on compatible FLIR cameras.

FLIR CM85

True RMS Clamp Meter (Wireless)

Technical Summary	CM85	Basic Accuracy
AC/DC Current	1000A	±2%
AC/DC Voltage	1000V	±1% /0.7%
AC VFD Voltage	1000V	±1%
Harmonics	1st-25th Order	±5%
Total Harmonic Distortion	0.0 to 99.9%	±3%
Inrush Current	1000ACA (Integration Time 100ms)	±3%
Active Power	10kW to 1000kW (10V, 5A min)	±3%
Diode Test	0.4 to 0.8V	±0.1V
Capacitance	3.999mF	±1.9%
Resistance	99.99kΩ	±1%
Continuity Threshold	30Ω	±1%
Frequency	20.00Hz to 9.999kHz	±0.5%
Bluetooth Range Max	32ft (10m)	—
Jaw Opening	1.77in (45mm, 1500MCM)	—
Category Rating	CAT IV-600V, CAT III-1000V	
Battery Type	6 x AAA	
Warranty	Limited Lifetime*	

ACCESSORIES

TEST LEADS AND PROBES

- CAT IV Insulated Alligator Probes (TA70)
- CAT IV Silicone Test Leads (TA80)

CASES AND POUCHES

- Protective Case (TA11)
- Universal Soft Sided Case (TA15)

BATTERIES AND POWER

- NiMH Rechargeable Battery Kit (TA03-KIT)

FLIR CM83

True RMS Clamp Meter (Wireless)

The FLIR CM83 is an industrial-grade power clamp meter engineered with advanced power analysis, harmonics measurements, and variable frequency drive (VFD) filtering functions to meet the needs of electrical troubleshooters. The meter features Bluetooth® technology to connect compatible mobile devices for remote viewing and sharing, and METERLiNK® technology to wirelessly embed electrical readings into radiometric infrared images on compatible FLIR thermal cameras.

FLIR CM83

True RMS Clamp Meter (Wireless)

SUPERIOR ACCURACY

- The True RMS clamp meters provide VFD Mode for superior accuracy while working on VFD-controlled equipment, and advanced power efficiency and harmonics measurements enable system-level performance analysis.

RELIABLE PERFORMANCE

- Features Inrush mode to capture AC Current spikes during start-up, and phase-rotation testing to ensure motor and power source alignment.

VIEW DATA REMOTELY, SHARE INSTANTLY

- View readings from your mobile device via Bluetooth; METERLiNK technology wirelessly embeds data into thermal images on compatible FLIR cameras.

FLIR CM83

True RMS Clamp Meter (Wireless)

Technical Summary	CM83	Basic Accuracy
AC/DC Current	600A	±2%
AC/DC Voltage	1000V	±1% /0.7%
AC VFD Voltage	1000V	±1%
Harmonics	1st-25th Order	±5%
Total Harmonic Distortion	0.0 to 99.9%	±3%
Inrush Current	600ACA (Integration Time 100ms)	±3%
Active Power	10kW to 600kW (10V, 5A min)	±3%
Diode Test	0.4 to 0.8V	±0.1V
Capacitance	3.999mF	±1.9%
Resistance	99.99kΩ	±1%
Continuity Threshold	30Ω	±1%
Frequency	20.00Hz to 9.999kHz	±0.5%
Bluetooth Range Max	32ft (10m)	—
Jaw Opening	1.45in (37mm, 1000MCM)	—
Category Rating	CAT IV-600V, CAT III-1000V	
Battery Type	6 x AAA	
Warranty	Limited Lifetime*	

ACCESSORIES

TEST LEADS AND PROBES

- CAT IV Insulated Alligator Probes (TA70)
- CAT IV Silicone Test Leads (TA80)

CASES AND POUCHES

- Protective Case (TA11)
- Universal Soft Sided Case (TA15)

BATTERIES AND POWER

- NiMH Rechargeable Battery Kit (TA03-KIT)

FLIR CM82

True RMS Clamp Meter

The FLIR CM82 is an industrial-grade power clamp meter engineered with advanced power analysis, harmonics measurements, and variable frequency drive (VFD) filtering functions to meet the needs of electrical troubleshooters. The meter features a backlit display screen with large, easy-to-read digits, an analog bargraph, and powerful work lights bright enough to serve as a primary work light. Also tested to withstand a 2m drop, the CM82 has dependable functionality that’s vital to professionals.

FLIR CM82

True RMS Clamp Meter

SUPERIOR ACCURACY

- Provides VFD Mode while working on VFD-controlled equipment, and advanced power efficiency and harmonics measurements enable system-level performance analysis.

RELIABLE PERFORMANCE

- Features Inrush mode to capture AC Current spikes during start-up, and phase-rotation testing to ensure motor and power source alignment.

CONVENIENT FOR TROUBLESHOOTING

- Features powerful LED lights that can serve as a primary work light and assist with clamping.

FLIR CM82

True RMS Clamp Meter

Technical Summary	CM82	Basic Accuracy
AC/DC Current	600A	±2%
AC/DC Voltage	1000V	±1% /0.7%
AC VFD Voltage	1000V	±1%
Harmonics	1st-25th Order	±5%
Total Harmonic Distortion	0.0 to 99.9%	±3%
Inrush Current	600ACA (Integration Time 100ms)	±3%
Active Power	10kW to 600kW (10V, 5A min)	±3%
Diode Test	0.4 to 0.8V	±0.1V
Capacitance	3.999mF	±1.9%
Resistance	99.99kΩ	±1%
Continuity Threshold	30Ω	±1%
Frequency	20.00Hz to 9.999kHz	±0.5%
Bluetooth Range Max	—	—
Jaw Opening	1.45in (37mm, 1000MCM)	—
Category Rating	CAT IV-600V, CAT III-1000V	
Battery Type	6 x AAA	
Warranty	Limited Lifetime*	

ACCESSORIES

TEST LEADS AND PROBES

- CAT IV Insulated Alligator Probes (TA70)
- CAT IV Silicone Test Leads (TA80)

CASES AND POUCHES

- Protective Case (TA11)
- Universal Soft Sided Case (TA15)

BATTERIES AND POWER

- NiMH Rechargeable Battery Kit (TA03-KIT)

FLIR CM78

1000 Amp Clamp with IR Thermometer

The FLIR CM78 is a True RMS industrial clamp meter for the electrician who works on high-powered equipment and temperature systems and needs a safe, capable combination tool. An integrated IR thermometer provides fast non-contact measurements on panels, conduits, and motors. FLIR Tools Mobile connects the FLIR CM78 to your compatible smartphones and tablets via Bluetooth®, and METERLiNK® technology wirelessly integrates electrical readings on your infrared image with FLIR thermal cameras.

FLIR CM78

1000 Amp Clamp with IR Thermometer

A SAFE COMBINATION TOOL

- Combines a True RMS digital multimeter, non-contact clamp meter, and spot IR thermometer into one tool.

ACCURATE MEASUREMENTS

- Take accurate AC/DC measurements safely and quickly on high-powered equipment or complex machinery and verify readings with the Type-K thermocouple.

REMOTE DIAGNOSTICS

- Features Bluetooth METERLiNK to wirelessly embed data into thermal images from FLIR infrared cameras, or instantly share readings with clients.

FLIR CM78

1000 Amp Clamp with IR Thermometer

TECHNICAL SUMMARY	MAX RANGE	BASIC ACCURACY
AC/DC Current	1000A	±2.5%
AC/DC Voltage	1000V	±1.5%
Resistance	40.00MΩ	±1.5%
Capacitance	4.000mF	±3%
Frequency	4000Hz	±1.5%
Temperature (IR)	-20 to 518°F, -20 to 270°C	±2%
IR Distance to Target Ratio	8 inches away : 1 inch spot size	
Type K Temperature	-4 to 1400°F, -20 to 760°C	±3%
GENERAL INFORMATION		
Bluetooth Range Max	32ft (10m)	
Jaw Opening	1.7in (42mm, 1500MCM)	
Category Rating	CAT IV-600V, CAT III-1000V	
Warranty	Limited Lifetime*	

ACCESSORIES

TEST LEADS AND PROBES

- CAT IV Insulated Alligator Probes (TA70)
- CAT IV Silicone Test Leads (TA80)
- Thermocouple Probe with Adapter (TA60)

CASES AND POUCHES

- Protective Case (TA11)
- Universal Soft Sided Case (TA15)

BATTERIES AND POWER

- NiMH Rechargeable Battery Kit (TA03-KIT)

FLIR CM55 /CM57

Flexible Clamp Meter 10 inch / 18 inch

The FLIR Flexible Clamp Meters with Bluetooth® are ergonomic tools designed to simplify difficult current measurements. Made with a narrow flexible coil clamp, the CM55 and CM57 let you easily take measurements in tight or awkward spots— a difficult task with a traditional hard jaw clamp meter. With Bluetooth communication for remote viewing and data transfer to iOS® and Android™ devices via the FLIR Tools Mobile App, you can analyze and share data fast right from the jobsite.

FLIR CM55 /CM57

Flexible Clamp Meter 10 inch / 18 inch

TAKE MEASUREMENTS IN TIGHT SPOTS

- Snake the flexible coil clamp around obstacles with ease, even in deep, crowded cabinets.

EASY INSPECTION AND NAVIGATION

- Made with bright, dual-LED worklights to illuminate dark cabinets, built to withstand a 3-meter drop, portable, lightweight, and tangle-firee, the CM55 and CM57 were designed with your convenience in mind without compromising measurement range. Made with bright, dual-LED worklights to illuminate dark cabinets, built to withstand a 3-meter drop, portable, lightweight, and tangle-firee, the CM55 and CM57 were designed with your convenience in mind without compromising measurement range.

SAFE, REMOTE VIEWING

- Transfer data to iOS and Android devices with FLIR Tools. Multiple units wirelessly connect for remote viewing of multiphase systems.

FLIR CM55 /CM57

Flexible Clamp Meter 10 inch / 18 inch

Flexible Clamp Meters	CM55	CM57
Maximum AC current	3000A	
AC response	True RMS	
AC current ranges and resolution	30.00A, 300.0A, 3000A	
Basic AC current accuracy (of reading)	± 3.0% + 5 digits	
Maximum resolution	0.01A	
AC current bandwidth	45Hz – 500Hz (sine wave)	
Inrush current	Min 0.5A, 100mS	
Data record mode	20,000 points , 1 min sample rate	
Positional error (distance from optimum)	0.6" (15mm) ± 2.0% 1.0" (25mm) ± 2.5% 1.4" (35mm) ± 3.0%	1.4" (35mm) ± 1.0% 2.0" (50mm) ± 1.5% 2.4" (60mm) ± 2.0%
Meter Data		
Display	3000 count LCD with backlight and multi-function indicators	
Max conductor diameter	2.4" (6cm)	4.7" (12cm)
Flex coil length	10" (25cm)	18" (45cm)
Flex coil diameter	0.3" (7.5mm)	
Flex coil tip diameter	0.5" (13mm)	
Worklight	Two white LEDs	
Bluetooth range max	32' (10m)	
Wireless ID# max	Up to 20	
Power supply	(2) 1.5V “AAA”	
Drop test	9.8' (3m)	
Agency approvals	FCC Class B, CE, UL	
Safety rating	CAT IV 600V, CAT III 1000V	
Standards	EN61010-1, EN61010-2-032, EN61326-1	
Warranty	Limited lifetime with registration*	

ACCESSORIES

CASES AND POUCHES

- Protective Case for DM9x & TA72/74 Series (TA10-F)
- TA17_Pouch for Clamp Meters
- Universal Soft Sided Case (TA15)

BATTERIES AND POWER

- NiMH Rechargeable Battery Kit (TA03-KIT)

FLIR CM42

True RMS Clamp Meter with Accu-Tip™

The FLIR CM4X Clamp Meter Family includes three professional and affordable True RMS meters designed to meet the needs of commercial and residential electricians: the CM42 AC clamp meter, the CM44 AC clamp meter with Type K thermocouple, and the CM46 AC/DC clamp meter with Type K thermocouple. Featuring Accu-Tip™ technology, taking amperage measurements on smaller-gauged wires can be done more accurately than ever – to a tenth of a digit!

FLIR CM42

True RMS Clamp Meter with Accu-Tip™

PRECISE, ACCURATE MEASUREMENTS

- Accu-Tip technology gives you highly accurate amperage measurements to a tenth of a digit on small-gauged wires. Each meter features VFD mode, MAX/MIN/AVG recording, frequency and diode measurement, data hold, low pass filter for voltage measurement, and more.

ENGINEERING YOU CAN HAVE CONFIDENCE IN

- The CM4X Clamp Meter Family features large, bright backlit displays so readings are always easy to see. Each meter can operate at temperatures as low as -10°C or as high as 50°C, are easy-to-grip, and rugged enough to last you for years to come!

PROFESSIONAL PERFORMANCE. AFFORDABLE PRICE.

- Choose a clamp meter based on the features you demand. Whether you need a professional True RMS clamp meter with a built-in Non-Contact Voltage Detector or require the ability to take thermocouple measurements with additional features like Zero mode and DC µA function, the CM4X family has a meter for you.

FLIR CM42

True RMS Clamp Meter with Accu-Tip™

Measurements	CM42	CM44	CM46	Basic Accuracy
DC Voltage	600 V	600 V	600 V	±1.0%
AC Voltage (Digital Low Pass Filter/VFD)	600 V	600 V	600 V	±1.0%
AC + DC Voltage (Digital Low Pass Filter/VFD)	—	—	600 V	±1.2%
Clamp-On AC Current (50-100 Hz) (100-400 Hz)	400 A	400 A	400 A	±1.8% ±2.0%
Accu-Tip Clamp-On AC Current	60 A	60 A	60 A	±1.5%
Clamp-On DC Current	—	—	400 A	±2.0%
Accu-Tip Clamp-On DC Current	—	—	60 A	±2.0%
Frequency	50-400 Hz	50-400 Hz	50-400 Hz	±1.0%
Resistance	60 kΩ	60 kΩ	60 kΩ	±1.0%
Capacitance	—	2500 µF	2500 µF	±2.0%
Diode	2.0 V	2.0 V	2.0 V	±1.5%
DCµA	—	2000 µA	2000 µA	±1.0%
Temperature	—	-40°C to 400°C (-40°F to 752°F)	-40°C to 400°C (-40°F to 752°F)	±1.0%
General Meter				
Display	3-5/6 digits 6000 counts			
Operating Temperature	-10°C to 50°C (14 to 122°F)			
Continuity	10Ω< & < 250Ω			
Recording	Min / Max / Avg			
Backlight LCD	Yes			
Drop Test	2m			
Certifications	UL , CE			
Category	CAT IV 300V / CAT III 600V			
Jaw Opening	30 mm Max			
NCV	Yes			
Warranty	Limited Lifetime			
Battery Type	2x AAA			

ACCESSORIES

TEST LEADS AND PROBES

- CAT IV Insulated Alligator Probes (TA70)
- CAT IV Silicone Test Leads (TA80)

CASES AND POUCHES

- Universal Soft Sided Case (TA15)
- TA17_Pouch for Clamp Meters

BATTERIES AND POWER

- NiMH Rechargeable Battery Kit (TA03-KIT)

FLIR CM44

True RMS Clamp Meter with Accu-Tip™

The FLIR CM4X Clamp Meter Family includes three professional and affordable True RMS meters designed for commercial and residential electricians. The CM42 and CM44 feature AC clamp measurement, and the CM46 offers both AC/DC measurement to meet your unique needs. Each meter is equipped with a bright backlit display for ease of use inside electrical panels. Accu-Tip™ technology delivers amperage measurements on smaller-gauged wires more accurately — to a tenth of a digit. All models offer MAX/MIN/AVG recording, frequency measurement, and electrical field detection to help you determine voltage presence and relative strength of the field. Made with an over-molded, easy-to-grip design, the CM4X clamp meter family is durable enough to withstand a two-meter drop, and the slim form factor is convenient to carry in your toolbag anywhere you go.

FLIR CM44

True RMS Clamp Meter with Accu-Tip™

PRECISE, ACCURATE MEASUREMENTS

- High accuracy and resolution in small panels
- Accu-Tip enables more accurate amperage measurements on smaller gauged wires
- MAX/MIN/AVG recording, and frequency and diode measurement
- Data hold, zero function, and low pass filter (VFD) for voltage measurement

ENGINEERING YOU CAN HAVE CONFIDENCE IN

- Professional performance at an affordable price

PROVIDES ALL THE CRITICAL FEATURES YOU NEED

- Built to accept up to a 30mm max conductor
- Electrical field detection (NCV) determines if voltage is present and the relative strength of the field for safety
- True RMS professional clamp meters

FLIR CM44

True RMS Clamp Meter with Accu-Tip™

Measurements	CM42	CM44	CM46	Basic Accuracy
DC Voltage	600 V	600 V	600 V	±1.0%
AC Voltage (Digital Low Pass Filter/VFD)	600 V	600 V	600 V	±1.0%
AC + DC Voltage (Digital Low Pass Filter/VFD)	—	—	600 V	±1.2%
Clamp-On AC Current (50-100 Hz) (100-400 Hz)	400 A	400 A	400 A	±1.8% ±2.0%
Accu-Tip Clamp-On AC Current	60 A	60 A	60 A	±1.5%
Clamp-On DC Current	—	—	400 A	±2.0%
Accu-Tip Clamp-On DC Current	—	—	60 A	±2.0%
Frequency	50-400 Hz	50-400 Hz	50-400 Hz	±1.0%
Resistance	60 kΩ	60 kΩ	60 kΩ	±1.0%
Capacitance	—	2500 µF	2500 µF	±2.0%
Diode	2.0 V	2.0 V	2.0 V	±1.5%
DCµA	—	2000 µA	2000 µA	±1.0%
Temperature	—	-40°C to 400°C (-40°F to 752°F)	-40°C to 400°C (-40°F to 752°F)	±1.0%
General Meter				
Display	3-5/6 digits 6000 counts			
Operating Temperature	-10°C to 50°C (14 to 122°F)			
Continuity	10Ω< & < 250Ω			
Recording	Min / Max / Avg			
Backlight LCD	Yes			
Drop Test	2m			
Certifications	UL , CE			
Category	CAT IV 300V / CAT III 600V			
Jaw Opening	30 mm Max			
NCV	Yes			
Warranty	Limited Lifetime			
Battery Type	2x AAA			

ACCESSORIES

TEST LEADS AND PROBES

- CAT IV Insulated Alligator Probes (TA70)
- CAT IV Silicone Test Leads (TA80)
- Thermocouple Probe with Adapter (TA60)

CASES AND POUCHES

- Universal Soft Sided Case (TA15)
- TA17_Pouch for Clamp Meters

BATTERIES AND POWER

- NiMH Rechargeable Battery Kit (TA03-KIT)

FLIR CM46

True RMS Clamp Meter with DC Current

The FLIR CM46 clamp meter is designed for commercial and residential electricians. Featuring both AC/DC measurement, the meter is equipped with a bright backlit display for use inside electrical panels. Accu-Tip™ technology delivers amperage measurements on smaller-gauged wires more accurately — to a tenth of a digit. The meter also offers MAX/MIN/AVG recording; measures DCμA, temperature, capacitance, and frequency; and has electrical field detection to help you determine voltage presence and relative strength of the field.

FLIR CM46

True RMS Clamp Meter with DC Current

PRECISE, ACCURATE MEASUREMENTS

- Accu-Tip technology gives you highly accurate amperage measurements to a tenth of a digit on small-gauged wires.

BUILT TO LAST

- Operates at temperatures as low as -10°C or as high as 50°C, easy to grip, and 2-meter drop tested.

PROFESSIONAL PERFORMANCE

- Built to accept up to a 30mm max conductor
- Electrical field detection (NCV) determines if voltage is present and the relative strength of the field for safety
- True RMS professional clamp meters

FLIR CM46

True RMS Clamp Meter with DC Current

Measurements	CM42	CM44	CM46	Basic Accuracy
DC Voltage	600 V	600 V	600 V	±1.0%
AC Voltage (Digital Low Pass Filter/VFD)	600 V	600 V	600 V	±1.0%
AC + DC Voltage (Digital Low Pass Filter/VFD)	—	—	600 V	±1.2%
Clamp-On AC Current (50-100 Hz) (100-400 Hz)	400 A	400 A	400 A	±1.8% ±2.0%
Accu-Tip Clamp-On AC Current	60 A	60 A	60 A	±1.5%
Clamp-On DC Current	—	—	400 A	±2.0%
Accu-Tip Clamp-On DC Current	—	—	60 A	±2.0%
Frequency	50-400 Hz	50-400 Hz	50-400 Hz	±1.0%
Resistance	60 kΩ	60 kΩ	60 kΩ	±1.0%
Capacitance	—	2500 µF	2500 µF	±2.0%
Diode	2.0 V	2.0 V	2.0 V	±1.5%
DCµA	—	2000 µA	2000 µA	±1.0%
Temperature	—	-40°C to 400°C (-40°F to 752°F)	-40°C to 400°C (-40°F to 752°F)	±1.0%
General Meter				
Display	3-5/6 digits 6000 counts			
Operating Temperature	-10°C to 50°C (14 to 122°F)			
Continuity	10Ω< & < 250Ω			
Recording	Min / Max / Avg			
Backlight LCD	Yes			
Drop Test	2m			
Certifications	UL , CE			
Category	CAT IV 300V / CAT III 600V			
Jaw Opening	30 mm Max			
NCV	Yes			
Warranty	Limited Lifetime			
Battery Type	2x AAA			

ACCESSORIES

TEST LEADS AND PROBES

- CAT IV Insulated Alligator Probes (TA70)
- CAT IV Silicone Test Leads (TA80)
- Thermocouple Probe with Adapter (TA60)

CASES AND POUCHES

- Universal Soft Sided Case (TA15)
- TA17_Pouch for Clamp Meters

BATTERIES AND POWER

- NiMH Rechargeable Battery Kit (TA03-KIT)

FLIR CM94

2000 A AC/DC Utility Clamp Meter

The CM94 clamp meter is designed to tackle high-current measurements in demanding utility and industrial job sites. Its oversized, 55 mm jaw can securely clamp around conductor wires and busbars for accurate readings up to 2000 A AC & DC. Designed with a CAT IV-1000 V safety rating, the CM94 is ready to work on relays, distribution panels, and switchgear as well as service conductors, feeders, and production power lines. VFD mode allows you to tackle noisy signal environments to ensure correct measurements when working on large motors and motor controls. Utilities and industrial electrical technicians demand the best, and FLIR delivers with the rugged and dependable CM94 clamp meter.

FLIR CM94

2000 A AC/DC Utility Clamp Meter

DESIGNED FOR SAFETY SO YOU CAN FOCUS ON RESULTS

- Get the right tool for high-current work with a CAT IV 1000 V protection rating and the ability to read up to 2000 A.

FUNCTIONS YOU NEED TO WORK FASTER & SMARTER

- This full-featured clamp meter with True RMS, LoZ, and VFD modes ensures accurate troubleshooting optimized for utility and industrial work.

BUILT WITH FEATURES TO SIMPLIFY YOUR WORKFLOW

- The oversized 55 mm jaw helps the ergonomic FLIR CM94 clamp around large conductors or multiple conductors at once

FLIR CM94

2000 A AC/DC Utility Clamp Meter

Basic measurement capabilities		
Safety category rating	CAT IV-1000 V	
True RMS	Yes	
Features		
Data hold	Yes	
Relative DC zero	Yes	
LoZ mode (auto range)	Yes	
VFD	Yes	
Jaw size	55 mm (2.2 in) max	
Non-contact voltage (NCV)	Yes	
Measurement and analysis	Range & resolution	Basic accuracy
AC current	200.0, 2000 A	±2%
DC current	200.0, 2000 A	±2%
AC voltage	6.000, 60.00, 600.0, 1000 V	±1.2% / 5d
AC voltage (digital low pass filter - VFD)	6.000, 60.00, 600.0, 1000 V	±2%
LoZ mode AC voltage	6.000, 60.00, 600.0, 1000 V	1.5%
DC voltage	6.000, 60.00, 600.0, 1000 V	±0.5%
LoZ mode DC voltage	6.000, 60.00, 600.0, 1000 V	1.3%
Frequency	40.00 Hz to 400.0 Hz (ACA) 50.00 Hz to 400.0 Hz (ACV)	±1% ±1%
Resistance	600.0, 6.000 k, 60.00 kΩ 600.0 kΩ 6.000 M 40.00 MΩ	±0.5% ±0.8% ±1.2% ±2.3%
Diode test	1.000 V	±1.0%
Capacitance	60.00 nF, 600.0 nF, 6.000 µF, 60.00 µF, 6000.0 µF, 2000 µF	±2.0%
Temperature	-50°C to 1000°C (-58°F to 1832°F)	±0.3%
Continuity	10 to 200 Ω, 2 kHz buzzer	

Display	
Screen	3-⅝ digits 6000 counts 3-½ digits 1999 counts for Hz
Backlight	Yes
Auto power off	34 minutes
Overload indication	"OL" or "-OL"
Low battery indication	Yes
General	
Operating temperature	-10°C to 50°C (14°F to 122°F)
Operating relative humidity	Maximum relative humidity 80% for temperature up to 31°C (88°F) decreasing linearly to 50% relative humidity at 50°C (122°F)
Storage temperature	-20°C to 60°C (-4°F to 140°F) <80% RH (with battery removed)
Drop Test	2 m (6.5 ft)
IP rating	IP40
Certifications	UL, CE, CSA, RCM
Battery type	2× AA
Size (L × W × H)	269 × 106 × 51 mm (10.6 × 4.2 × 2.0 in)
Weight	700 g (24.7 oz)
Box contents	Test lead set, quick start guide, manual, soft carrying pouch, banana plug Type-K thermocouple

ACCESSORIES

TEST LEADS AND PROBES

- CAT IV Insulated Alligator Probes (TA70)
- CAT IV Silicone Test Leads (TA80)

CASES AND POUCHES

- Universal Soft Sided Case (TA15)
- TA17_Pouch for Clamp Meters

FLIR CM65

True RMS 600 A Solar Clamp Meter

The CM65 clamp meter is designed for solar installation, maintenance, and troubleshooting professionals. Photovoltaic (PV) installers can trust this rugged solar clamp meter to accelerate and simplify PV panel testing at new and existing sites. The quick-connect MC4 test leads and non-invasive clamp-on current readings make DC voltage measurements on solar panel strings and inverters safer, more accurate and easier to perform. Validate AC output and inverter efficiency quickly, and monitor readings from your smartphone via a wireless METERLiNK® connection to the FLIR Tools® mobile app. These features make the FLIR CM65 the PV installer's go-to clamp meter for faster, safer results.

FLIR CM65

True RMS 600 A Solar Clamp Meter

OPTIMIZED FOR SOLAR INSTALLERS

- Get accurate testing capabilities like True RMS, LoZ, and Millivolt modes to get the job done right the first time.

DESIGNED TO HELP YOU WORK FASTER & SMARTER

- This full-featured clamp meter with solar industry-standard MC4 connectors saves time and pinpoints trouble quickly.

THE RIGHT TECH TO SIMPLIFY YOUR WORKFLOW

- The FLIR CM65 is packed with tech tools to help you validate testing, document readings and share results with crews and customers.

FLIR CM65

True RMS 600 A Solar Clamp Meter

Basic measurement capabilities		
Safety category rating	CAT IV-600 V, CAT III-1000 V	
True RMS	Yes	
Features		
Data hold	Yes	
Min/Max	Yes	
Relative DC zero	Yes	
Loz mode (auto range)	Yes	
VFD	Yes	
Jaw size	30 mm (1.1 in) max	
Measurement and analysis	Range & resolution	Basic accuracy
AC current	60.00, 600.0 A	±1.5%
DC current	60.00, 600.0 A	±1.5%
AC voltage	60.00, 600.0, 1000 V	±0.7%
AC voltage (digital low pass filter - VFD)	600.0, 1000 V	±1%
LoZ mode AC voltage	600.0, 1000 V	±2.0%
AC voltage (mV mode)	60.00, 600.0 mV	±1.0%
DC voltage	60.00, 600.0, 1000 V	±1%
LoZ mode DC voltage	60.00, 600.0, 1000 V	±2.0%
DCV (mV mode)	60.00, 600.0 mV	±1%
Frequency	50.00 Hz to 400.0 Hz (ACA) 10.00 Hz to 400.0 Hz (ACV) 10.00 Hz to 500.0 Hz (ACV mV)	±1% ±1% ±1%
Resistance	600.0 k, 6.000 kΩ	±1.0%
Diode test	3.000 V	±0.9%
Temperature	-40°C to 400°C (-40°F to 752°F)	±1%
Continuity	< 30 Ω, 2 kHz buzzer	

Wireless connectivity	
METERLiNK®	Yes
Display	
Screen	3-5/6 digits, 6000 counts
Backlight	Yes
Auto power off	10 minutes (default)
Sampling rate	5 readings / second
Overload indication	"OL" or "-OL"
Additional features	
Data Logging and storage	Automatically log readings every 10 seconds. Data log files can be transferred via USB port.
Memory	8 GB internal memory
Operating temperature	0°C to 60°C (32°F to 140°F)
Operating relative humidity	Maximum relative humidity 80% for temperature up to 31°C (88°F) decreasing linearly to 50% relative humidity at 50°C (122°F)
Storage temperature	-30°C to 60°C (-22°F to 140°F) <80% RH (with battery removed)
Drop test	1 m (3.3 ft)
IP rating	IP40
Battery type	3× AA
Size (L × W × H)	251 × 80 × 40 mm (9.8 × 3.1 × 1.6 in)
Weight	300 g (10.6 oz)
Box contents	Test lead set, MC4 test leads, quick start guide, manual, soft carrying pouch, Type-K thermocouple

ACCESSORIES

TEST LEADS AND PROBES

- CAT IV Insulated Alligator Probes (TA70)
- CAT IV Silicone Test Leads (TA80)

CASES AND POUCHES

- Universal Soft Sided Case (TA15)
- TA17_Pouch for Clamp Meters

Clamp Meters Accessories

TA80
CAT IV Silicone Test Leads

301-25-651

TA70
CAT IV Insulated Alligator Probes

301-25-649

TA60
Thermocouple Probe with Adapter

301-25-648

TA50
Magnetic Hanging Strap

301-25-646

TA52
Magnetic Meter Mount

301-25-647

TA42
Belt Clip

301-25-645

TA72
10 Inch Universal Flex Current Probe

301-25-650

TA74
18 Inch Universal Flex Current Probe

301-16-401

TA10
Protective Case

301-25-639

TA10-F
Protective Case

301-25-640

TA15
Universal Soft Sided Case

301-25-644

TA16
Soft Protective Case

TA04
Lithium Polymer Rechargeable Battery Kit

301-25-638

TA03
NiMH Rechargeable Battery Kit

301-25-637

TA11
Protective Case

301-25-641

TA17
Soft Pouch for Clamp Meters

TA83
Replacement Test Leads

301-60-862

Comparison Guide CM

Specs	Residential/Commercial			Commercial/Industrial						Industrial					
Model	FLIR CM42	FLIR CM44	FLIR CM46	FLIR CM65	FLIR CM72	FLIR CM74	FLIR CM174	FLIR CM275	FLIR CM78	FLIR CM82	FLIR CM83	FLIR CM85	FLIR CM55	FLIR CM57	FLIR CM94
IGM® Resolution	—	—	—	–	—	—	80 x 60	160 x 120	IR Thermometer	—	—	—	—	—	–
IGM Temperature Range	—	—	—	–	—	—	-10°C to 150°C (14°F to 302°F)	-10°C to 150°C (14°F to 302°F)	-20°C to 270°C (-4°F to 518°F)	—	—	—	—	—	–
Display Counts/ Type	6000/Backlit LCD	6000/Backlit LCD	6000/Backlit LCD	3-5/6 digits 6000 counts	6000/Backlit LCD	6000/Backlit LCD	6000/2 in Color TFT	6000/2.4 in Color TFT	4000/Backlit LCD	10000/Backlit LCD	10000/Backlit LCD	10000/Backlit LCD	3000/Backlit LCD	3000/Backlit LCD	3-5/6 digits 6000 counts; 3-1/2 digits 1999 counts for Hz
Jaw Opening	1.2 in (30 mm)	1.2 in (30 mm)	1.2 in (30 mm)	1.18 in (30 mm)	1.38 in (35 mm)	1.38 in (35 mm)	1.38 in (35 mm)	1.38 in (35 mm)	1.70 in (42 mm)	1.45 in (37 mm)	1.45 in (37 mm)	1.77 in (45 mm)	10 in (25 cm) Flex Coil	18 in (45 cm) Flex Coil	2.17 in (55 mm)
AC/DC Voltage	600 V	600 V	600 V	1000 V	600 V	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V	—	—	1000 V
VFD AC Voltage	600 V	600 V	600 V	1000 V	—	1000 V	•	•	—	•	•	•	—	—	1000 V
LoZ AC/DC Voltage	—	—	—	1000 V	•	•	•	•	—	—	—	—	—	—	1000 V
AC Current	400 A	400 A	400 A	600.0 A	600 A	600 A	600 A	600 A	1000 A	600 A	600 A	1000 A	3000 A	3000 A	2000 A
DC Current	—	—	400 A	600.0 A	—	600 A	600 A	600 A	1000 A	600 A	600 A	1000 A	—	—	2000 A
VFD AC Current	—	—	—	–	600 A	600 A	600 A	600 A	—	—	—	—	—	—	–
Inrush AC Current	—	•	•	–	—	•	•	•	—	•	•	•	•	•	–
Resistance	60.00 kΩ	60.00 kΩ	60.00 kΩ	600.0, 6.000 kΩ	6.00 kΩ	6.00 kΩ	6.00 kΩ	6.00 kΩ	40.00 MΩ	100 kΩ	100 kΩ	100 kΩ	—	—	40.00 MΩ
Capacitance	—	2500 µF	2500 µF	–	1000 µF	1000 µF	1000 µF	1000 µF	4000 µF	4000 µF	4000 µF	4000 µF	—	—	6.000 µF
Frequency	1.00 kHz	1.00 kHz	1.00 kHz	1.0 kHz	60.00 kHz	60.00 kHz	60.00 kHz	60.00 kHz	4.00 kHz	10.00 kHz	10.00 kHz	10.00 kHz	—	—	0.4 kHz
Temperature	—	-40°C to 400°C (-40°F to 752°F)	-40°C to 400°C (-40°F to 752°F)	-40.0to 400°C (-40.0°F to 752°F)	—	—	—	—	-20°C to 760°C (-4°F to 1400°F)	—	—	—	—	—	-50°C to 1000°C (-58°F to 1832°F)
Min/Max/ Average	•	•	•	Min/Max	Min/Max	Min/Max	Min/Max	Min/Max	•	•	•	•	—	—	–
Peak	—	•	•	–	—	—	—	—	•	•	•	•	—	—	–
Power/Power Factor	—	—	—	–	—	—	—	—	—	600 kW/0.0 to 1.0	600 kW/0.0 to 1.0	1000 kW/0.0 to 1.0	—	—	–
Harmonics/ Total Harmonic Distortion (THD)	—	—	—	–	—	—	—	—	—	1 to 25/0 to 99.9	1 to 25/0 to 99.9	1 to 25/0 to 99.9	—	—	–
Phase Rotation	—	—	—	–	—	—	—	—	—	•	•	•	—	—	–
Non-Contact Voltage Detector (NCV)	•	•	•	–	—	—	—	—	—	•	•	•	—	—	–
Worklights	—	—	—	–	•	•	•	•	•	•	•	•	•	•	–
Data Storage	—	—	—	Record measuring data	—	—	—	10 files (40k readings each), 100 images	—	—	—	—	2000 readings	2000 readings	–
Bluetooth®/ METERLiNK®	—	—	—	•	—	—	—	•	•	—	•	•	•	•	–
Safety Category	CAT IV-300V CAT III-600V	CAT IV-300V CAT III-600V	CAT IV-300V CAT III-600V	CAT IV-600 V, CAT III-1000 V	CAT IV-600V CAT III-1000V	CAT IV-600V CAT III-1000V	CAT IV-600V CAT III-1000V	CAT IV-600V CAT III-1000V	CAT IV-600V CAT III-1000V	CAT IV-600V CAT III-1000V	CAT IV-600V CAT III-1000V	CAT IV-600V CAT III-1000V	CAT IV-600V CAT III-1000V	CAT IV-600V CAT III-1000V	CAT IV-1000V

Digital Multimeters

FLIR DM285
Industrial Imaging Multimeter with IGM™

301-00-823

FLIR DM166
Imaging TRMS Multimeter

301-00-821

FLIR DM93
True RMS Industrial Multimeter with METERLiNK®

110-81-521

FLIR DM92
True RMS Industrial Multimeter

301-16-393

FLIR DM91
Industrial TRMS Multimeter with Datalogging (Wireless)

301-00-831

FLIR DM90
TRMS Multimeter with Type K Temp

301-16-392

FLIR DM66
TRMS Multimeter with VFD Mode

301-00-829

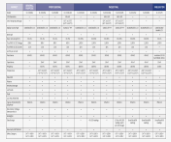
FLIR DM64
HVAC TRMS Digital Multimeter

301-00-828

FLIR DM62
TRMS Digital Multimeter with Non-contact Voltage

301-00-825

Accessories



Comparison Guide

FLIR DM285

Industrial Imaging Multimeter with IGM™

The FLIR DM285 is a professional, all-in-one True RMS digital multimeter and thermal imager. Featuring Infrared Guided Measurement (IGM) technology powered by a built-in 160 x 120 FLIR thermal imager, the DM285 visually guides you to the precise location of an electrical problem without direct contact. You'll pinpoint hot spots faster, safer, and more efficiently. The DM285 also helps streamline inspections by connecting wirelessly to FLIR Tools® app for uploading thermal images and measurement data.

FLIR DM285

Industrial Imaging Multimeter with IGM™

PINPOINT PROBLEMS QUICKLY AND SAFELY

- Find more work by visually identifying issues with IGM, and scan a panel or cabinet for hazards without direct contact.

SOLVE CHALLENGING PROBLEMS EASILY

- Performs 18 DMM measurement functions to help you verify the most complex electrical issues with trusted readings every time

STREAMLINED REPORTING AND SHARING

- Features Bluetooth METERLiNK® to wirelessly embed data into thermal images from FLIR infrared cameras, or instantly share readings with clients.

FLIR DM285

Specifications

Thermal Imaging	DM285	
IR Resolution	160 x 120 (19,200 pixels)	
Thermal Imaging Detector	FLIR Lepton® microbolometer	
Temperaturea Sensitivity	≤ 150 mK	
Emissivity Settings	4 presets with custom adjustment	
Temperature Accuracy	3°C or 3.5%	
Temperature Range	14°F to 302°F (-10°C to 150°C)	
Field of View	50° x 38°	
Laser Pointer	Yes	
Focus	Fixed	
Thermal Imaging Palette	Iron, Rainbow, Grayscale	
Level & Span	Auto	
True RMS	Yes	
	Range	Basic Accuracy
AC / DC Volts	1000 V	±1.0% / 0.09%
AC / DC mVolt	600.0 mV	±1.0% / 0.5%
VFD AC Volts	1000 V	±1.0%
AC / DC LoZ V	1000 V	±2.0%
AC / DC Amps	10.00 A	±1.5% / 1.0%
AC / DC mAmps	400.0 mA	±1.5% / 1.0%
AC / DC µAmps	4,000 µA	±1.0%
Resistance	6.000 MΩ 50.00 MΩ	±0.9% ±3.0%
Capacitance	10.00 mF	±1.9%
Diode Test	1.500 V	±0.9%
Flex Clamp Range	3000 A AC (Optional TA72/74)	±3.0% + 5 digits
Frequency Counter	100.00 kHz	±0.1%
Temperature, Type-K Thermocouple	-40°F to 752.0°F -40°C to 400°C	±1.0% + 5.4°F ±1.0% + 3°C

Additional Measurements	DM285
Continuity Check	20 Ω and 200 Ω
Measuring Rate	3 samples per second
Min/Max/Avg	Yes
Connectivity	Bluetooth®
Data Logging & Storage	10 sets of 40K scalar measurements, 100 images
Auto Power Off	Yes
Worklights	Yes
Display Size	2.8 in TFT screen
Battery	3 AA batteries; optional TA04 Li-Poly rechargeable battery
Drop Test	3 m
IP Rating	IP40
Safety Category Rating	CAT III-1000V, CAT IV-600V
Size (L x W x H)	200 x 95 x 49 mm (7.9 × 3.7 × 1.9 in)
Weight	537 g (18.9 oz)
Warranty	10 year on product and detector
Box Contents	Multimeter, L91 lithium batteries, silicone test leads, test lead storage/tripod accessory, Type-K thermocouple, alligator probes, soft carrying case

Ordering Information	Order #
FLIR DM285 Industrial Imaging Multimeter with Datalogging, Connectivity, IGM	793950372876
For a complete list of available accessories, go to: flir.com/store/instruments/testaccessories	

ACCESSORIES

- TEST LEADS AND PROBES
  - CAT IV Insulated Alligator Probes (TA70)
  - CAT IV Silicone Test Leads (TA80)
  - Thermocouple Probe with Adapter (TA60)
- CASES AND POUCHES
  - Protective Case (TA10)
  - Protective Case for DM9x & TA72/74 Series (TA10-F)
  - TA 16
  - Universal Soft Sided Case (TA15)
- BATTERIES AND POWER
  - Lithium Polymer Rechargeable Battery Kit (TA04-KIT)
- MOUNTS AND HOUSINGS
  - Magnetic Meter Mount (TA52)
- STRAPS AND HOLSTERS
  - Belt Clip (TA42)
  - Magnetic Hanging Strap (TA50)
- Universal Flex Current Probe
  - FLIR TA72
  - FLIR TA74

FLIR DM166

Imaging TRMS Multimeter with IGM™

The FLIR DM166 is the most affordable multimeter with built-in thermal imaging — a must-have tool for commercial electricians, automation, electronics, and HVAC technicians. Featuring Infrared Guided Measurement (IGM™) powered by an 80 x 60 FLIR thermal imager, the DM166 visually guides you to the precise location of temperature anomalies and potential problems faster, more safely, and efficiently. The feature-packed multimeter is an ideal tool for troubleshooting and diagnosing complex issues in both high- and low-voltage applications.

FLIR DM166

Imaging TRMS Multimeter with IGM™

TROUBLESHOOT FASTER

- Quickly scan for overheating components with IGM, and diagnose faults with broad DMM test functions

WORK SAFER

- Identify energized and potentially faulty equipment from a safe distance using non-contact temperature measurement

DIAGNOSE PROBLEMS MORE EFFICIENTLY

- Provides a rich feature set for both high-voltage and low-voltage applications: Variable Frequency Drive, resistance, frequency, capacitance, and more.

FLIR DM166

Specifications

Thermal Imaging	DM166	
IR Resolution	80 x 60 pixels (4,800 pixels)	
Thermal Imaging Detector	FLIR Lepton® microbolometer	
Temperature Sensitivity	≤ 150 mK	
Emissivity Settings	4 presets with custom adjustment	
Temperature Accuracy	3°C or 3%	
Temperature Range	14° F to 302°F (-10C to 150° C)	
Field of View	50° x 38°	
Laser Pointer	Yes	
Focus	Fixed	
Thermal Imaging Palette	Iron, Rainbow, Grayscale	
Level & Span	Auto	
Measurements		
True RMS	Yes	
	Range	Basic Accuracy
AC / DC Volts	600.0 V	±0.7% / 0.5%
AC / DC mVolt	600.0 mV	±1% / 0.3%
VFD AC Volts	600.0 V	±1.0%
AC / DC Amps	10.00 A	±1.0% / 0.7%
AC / DC mAmps	600.0 mA	±1.0% / 0.7%
AC / DC µAmps	6000 µA	±1.5% / 1.0%
Resistance	6.000 MΩ 60.00 MΩ	±0.9% ±1.5%
Capacitance	2.000 mF 10.00 mF	±2.0% ±5.0%
Diode Test	3.000 V	±0.9%
Frequency Counter	50.00 kHz	±0.3%
Temperature, Type-K Thermocouple	-40°F to 752.0°F -40°C to 400°C	±1.0% + 3°F ±1.0% + 1.5°C

Additional Measurements	DM166
Continuity Check	30 Ω and 480 Ω
Measuring rate	5 samples per second
General Information	
Auto Power Off	Yes
Display Size	2.4 in TFT screen
Battery	3 AA batteries; optional TA04 Li-Poly rechargeable battery
Drop Test	3 m
IP Rating	IP40
Safety Category Rating	CAT III-600V, CAT IV-300V
Size (L x W x H)	190 × 86.4 × 48.3 mm (7.5 × 3.4 × 1.9 in)
Weight	428.3 g (15.1 oz)
Warranty	10 year on product and detector
Box Contents	
	DM166, L91 lithium batteries, silicone test leads, soft carrying case
Ordering Information	Order #
FLIR DM166 Thermal Imaging TRMS Multimeter with IGM	793950391662

ACCESSORIES

- TEST LEADS AND PROBES
  - CAT IV Insulated Alligator Probes (TA70)
  - CAT IV Silicone Test Leads (TA80)
  - Thermocouple Probe with Adapter (TA60)
- CASES AND POUCHES
  - Protective Case for DM9x & TA72/74 Series (TA10-F)
  - TA 16
  - Universal Soft Sided Case (TA15)
- BATTERIES AND POWER
  - Lithium Polymer Rechargeable Battery Kit (TA04-KIT)
- STRAPS AND HOLSTERS
  - Belt Clip (TA42)
  - Magnetic Hanging Strap (TA50)
- Universal Flex Current Probe
  - FLIR TA72
  - FLIR TA74

FLIR DM93

True RMS Industrial Multimeter

The FLIR DM93 world-class digital multimeter offers advanced variable frequency drive filtering to help you accurately analyze non-traditional sine waves and noisy signals. No matter what electrical challenge you're up against, the DM93's powerful lighting and durable design will make the job simple. The DM93 also features Bluetooth® technology to connect a compatible smartphone for remote viewing and sharing, as well as METERLiNK® technology to wirelessly embed electrical readings into radiometric infrared images on compatible FLIR thermal cameras.

FLIR DM93

True RMS Industrial Multimeter

ACCURATE READINGS

- Provides advanced variable frequency drive filtering and dual display, True RMS voltage and current, and LoZ mode.

EASY TO TROUBLESHOOT

- Offers LED worklights to eliminate the need for a flashlight, durable construction, a backlit display, and an analog bargraph.

REMOTE VIEWING AND SHARING

- Bluetooth® enables wireless data transfer and METERLiNK® technology embeds data into live and saved thermal images from FLIR thermal cameras.

FLIR DM92

True RMS Industrial Multimeter

FLIR’s DM92 world-class digital multimeters offer advanced variable frequency drive filtering to help you accurately analyze non-traditional sine waves and noisy signals. No matter what electrical challenge you're up against, the DM92 powerful lighting and durable design will make the job simple.

FLIR DM92

True RMS Industrial Multimeter

ACCURATE READINGS

- The DM92 provide features that make it easy to clearly analyze non-traditional sine wave and noisy signals including advanced variable frequency drive filtering and dual display, True RMS voltage and current, and LoZ mode.

EASY TO TROUBLESHOOT

- Offers LED worklights to eliminate the need for a flashlight, durable construction, a backlit display, and an analog bargraph.

EFFICIENT DESIGN

- The DM92 constructed to make any electrical challenge easier to troubleshoot, durable double-molded construction (IP54, 3m drop test), large, easy-to-read digits, a backlit display.

FLIR DM92 / DM93

Specifications

Technical Summary	MAX Range	Basic Accuracy
DC Voltage	1000.0V	±0.05%
AC Voltage	1000.0V	±0.5%
VFD AC Voltage	1000.0V	±0.5%
DC Current	10.000A	±0.2%
AC Current	10.000A	±1.0%
Resistance	40.00MΩ	±0.2%
Continuity Threshold	30Ω	±0.2%
Frequency	100.00kHz	±5 Digits
Capacitance	40.00mF	±0.9%
Temperature	-328 to 2192°F, -200 to 1200°C	±1.0%
Diode Test	2V	±1.5%
General Information		
Display Counts	40,000	
IP Rating, Drop Test	IP 54, 3m (9.8')	
Category Rating	CAT IV-600V, CAT III-1000V	
Battery Type	6 x AAA	
Bluetooth Range Max (DM93 only)	32ft (10m)	
Data Recording (DM93 only)	20,000 Pts (125 days max)	
Memory	99 internal storage locations	
Warranty	Limited Lifetime*	

ACCESSORIES

- TEST LEADS AND PROBES
  - CAT IV Insulated Alligator Probes (TA70)
  - CAT IV Silicone Test Leads (TA80)
  - Thermocouple Probe with Adapter (TA60)
- CASES AND POUCHES
  - Protective Case (TA10)
  - Protective Case for DM9x & TA72/74 Series (TA10-F)
  - TA 16
  - Universal Soft Sided Case (TA15)
- BATTERIES AND POWER
  - NiMH Rechargeable Battery Kit (TA03-KIT)
- MOUNTS AND HOUSINGS
  - Magnetic Meter Mount (TA52)

FLIR DM91

Industrial TRMS Multimeter with Datalogging (Wireless)

The FLIR DM91 offers comprehensive features and durable design for quick and safe troubleshooting of electrical, electronic, and HVAC/R systems. Equipped with LoZ, VFD Mode, µA current measurement capability and more, the DM91 provides trusted results for the most accurate diagnosis of problems. The DM91 is enhanced with Bluetooth® technology to wirelessly connect via METERLiNK® to FLIR infrared cameras, or to mobile devices running the FLIR Tools™ app.

FLIR DM91

Industrial TRMS Multimeter with Datalogging (Wireless)

ACCURATE READINGS

- Diagnose complex systems with True RMS, LoZ, VFD, and more. Assess temperatures up to 400°C (752°F) with the Type-K thermocouple.

WORK LONGER WITHOUT INTERRUPTION

- DM91 offers powerful LED worklights and flexible battery options; datalogging and storage allows you to document intermittent trends.

STREAMLINE REPORTING AND SHARING

- Bluetooth METERLiNK® allows you to wirelessly share readings with clients or embed data into FLIR thermal camera images.

FLIR DM92 / DM93

Specifications

Technical Summary	MAX Range	Basic Accuracy
DC Voltage	1000.0V	±0.05%
AC Voltage	1000.0V	±0.5%
VFD AC Voltage	1000.0V	±0.5%
DC Current	10.000A	±0.2%
AC Current	10.000A	±1.0%
Resistance	40.00MΩ	±0.2%
Continuity Threshold	30Ω	±0.2%
Frequency	100.00kHz	±5 Digits
Capacitance	40.00mF	±0.9%
Temperature	-328 to 2192°F, -200 to 1200°C	±1.0%
Diode Test	2V	±1.5%
General Information		
Display Counts	40,000	
IP Rating, Drop Test	IP 54, 3m (9.8')	
Category Rating	CAT IV-600V, CAT III-1000V	
Battery Type	6 x AAA	
Bluetooth Range Max (DM93 only)	32ft (10m)	
Data Recording (DM93 only)	20,000 Pts (125 days max)	
Memory	99 internal storage locations	
Warranty	Limited Lifetime*	

ACCESSORIES

- TEST LEADS AND PROBES
  - CAT IV Insulated Alligator Probes (TA70)
  - CAT IV Silicone Test Leads (TA80)
  - Thermocouple Probe with Adapter (TA60)
- CASES AND POUCHES
  - Protective Case (TA10)
  - Protective Case for DM9x & TA72/74 Series (TA10-F)
  - TA 16
  - Universal Soft Sided Case (TA15)
- BATTERIES AND POWER
  - NiMH Rechargeable Battery Kit (TA03-KIT)
- MOUNTS AND HOUSINGS
  - Magnetic Meter Mount (TA52)

FLIR DM90

TRMS Multimeter with Type K Temp

The DM90 is an affordable True RMS digital multimeter with a Type-K Thermocouple, an ideal tool for electricians, service technicians, and HVAC professionals to have on the job. With rich features including LoZ, VFD Mode and uA current measurement capability, the DM90 gives you trusted readings to troubleshoot and repair a wide range of electrical and electronic systems. The DM90 is shipped fully tested and calibrated, and with proper use, will provide years of reliable service.

FLIR DM90

TRMS Multimeter with Type K Temp

TRUSTED, ACCURATE READINGS

- Diagnose complex systems with True RMS, LoZ, VFD, and more. Assess temperatures up to 400°C (752°F) with the Type-K thermocouple.

AN IDEAL FIELD TOOL

- Simplify your job with LED worklights, a customizable settings option menu, a digital LCD display, and on-screen programming menu navigation

BUILT TO LAST

- Made tough for protection against water (IP54 rating) and a 3-meter drop.

FLIR DM90 / DM91

Specifications

Features by Meter	DM90	DM91
Connectivity	–	Bluetooth®
Data Logging & Storage	–	1 file of 40k scalar measurements
Measurements-Both Models		
True RMS	Yes	Yes
	Range	Basic Accuracy
AC / DC Volts	1000 V	±1.0% / 0.09%
AC / DC mVolt	600.0 mV	±1.0% / 0.5%
VFD AC Volts	1000 V	±1.0%
AC / DC LoZ V	1000 V	±2.0%
AC / DC Amps	10.00 A	±1.5% / 1.0%
AC / DC mAmps	400.0 mA	±1.5% / 1.0%
AC / DC µAmps	4,000 µA	±1.0%
Resistance	6.000 MΩ 50.00 MΩ	±0.9% ±3.0%
Capacitance	10.00 mF	±1.9%
Diode Test	1.500 V	±0.9%
Frequency Counter	100.00 kHz	±0.1%
Temperature, Type-K Thermo- couple	-40°F to 752.0°F -40°C to 400°C	±1.0% + 5.4°F ±1.0% + 3°C

Additional Measurements	DM90	DM91
Continuity Check	600 Ω	20 Ω and 200 Ω
Measuring Rate	3 samples per second	3 samples per second
General Information		
Auto Power Off	Yes	Yes
Worklights	Yes	Yes
Battery	4 AAA batteries; optional TA04 Li-Poly rechargeable battery	3 AA batteries; optional TA04 Li-Poly rechargeable battery
Drop Test	3 m	3 m
IP Rating	IP54	IP40
Safety Category Rating	CAT IV-600V, CAT III-1000V	CAT IV-600V, CAT III-1000V
Size (L x W x H)	200 × 95 × 49 mm (7.9 × 3.7 × 1.9 in)	200 × 95 × 49 mm (7.9 × 3.7 × 1.9 in)
Weight	536 g (18.9 oz)	535 g (18.8 oz)
Warranty	Limited lifetime warranty	Limited lifetime warranty
Box Contents		
	FLIR digital multimeter, batteries, silicone test leads, alligator clips, test lead storage/holder attachment, Type-K thermocouple, soft carrying case	

Ordering Information	Order #
FLIR DM90 True RMS Industrial Multimeter	793950370841
FLIR DM91 Industrial TRMS Multimeter with Datalogging, Connectivity	793950370919
For a complete list of available accessories, go to: flir.com/store/instruments/testaccessories	

ACCESSORIES

- TEST LEADS AND PROBES
  - CAT IV Insulated Alligator Probes (TA70)
  - CAT IV Silicone Test Leads (TA80)
  - Thermocouple Probe with Adapter (TA60)
- CASES AND POUCHES
  - Protective Case (TA10)
  - Protective Case for DM9x & TA72/74 Series (TA10-F)
  - TA 16
  - Universal Soft Sided Case (TA15)
- BATTERIES AND POWER
  - Lithium Polymer Rechargeable Battery Kit (TA04-KIT)
- MOUNTS AND HOUSINGS
  - Magnetic Meter Mount (TA52)
- STRAPS AND HOLSTERS
  - Belt Clip (TA42)
  - Magnetic Hanging Strap (TA50)
- Universal Flex Current Probe
  - FLIR TA72
  - FLIR TA74

FLIR DM66

TRMS Multimeter with VFD Mode

The DM66 digital multimeter is ideal for automation field service or electronics technicians, providing a comprehensive feature set including low impedance (LoZ) mode, frequency, diode, capacitance, and a Type K thermocouple input for temperature measurement. The multimeter combines rich features, precise measurements, and quality construction into a tool of exceptional value. Easy to use and built to last, the DM66 offers long-term stability for everyday use.

FLIR DM66

TRMS Multimeter with VFD Mode

ALL THE FEATURES YOU NEED

- Provides rich features for various electrical applications including AC/DC measurement, safe non-contact voltage detection, a flashing backlight, and audible indicator.

QUICK, EFFICIENT TESTING AND TROUBLESHOOTING

- Navigate the meter’s on-screen menu system easily and operate one-handed thanks to the compact design and easy-to-access buttons.

HIGH QUALITY, TOUGH, RELIABLE

- The DM66 is drop-tested, IP40 rated, and has a CAT IV-300V, CAT III-600V safety category rating to ensure safe and accurate operation.

FLIR DM62 / DM66

Specifications

Measurements by Meter	DM62	DM66
Capacitance	–	200.0 nF (±1.5%)
	–	10.00 mF (±4.5%)
AC / DC LoZ Volts	–	600.0 V (±2.0%)
Frequency Counter	–	50.00 kHz (±0.1%)
Temperature, Type-K Thermocouple	–	-40°F to 752.0°F (±1.0% + 2.0°F) -40°C to 400.0°C (±1.0% + 1.0°C)
Measurements-Both Models		
True RMS	Yes	
	Range	Basic Accuracy
AC / DC Volts	600.0 V	±1.0% / 0.4%
AC / DC mVolt	600.0 mV	±1.0% / 0.4%
VFD AC Volts	600.0 V	±1.0%
AC / DC Amps	10.00 A	±1.5% / 1.0%
AC / DC mAmps	600.0 mA	±1.0% / 0.7%
AC / DC µAmps	6,000 µA	±1.5% / 1.0%
Resistance	6.000 MΩ	±0.9%
Diode Test	3.000 V	±0.9%

Additional Measurements	DM62	DM66
Continuity Check	30 Ω and 480 Ω	30 Ω and 480 Ω
Measuring Rate	5 samples per second	5 samples per second
General Information		
Auto Power Off	Yes	Yes
Battery	2 AAA batteries	2 AAA batteries
Drop Test	2 m	2 m
IP Rating	IP40	IP40
Safety Category Rating	CAT IV-300V, CAT III-600V	CAT IV-300V, CAT III-600V
Size (H x W x L)	161 × 80 × 50 mm (6.3 × 3.2 × 2.0 in)	161 × 80 × 50 mm (6.3 × 3.2 × 2.0 in)
Weight	334 g (11.8 oz)	334 g (11.8 oz)
Warranty	Limited lifetime warranty	Limited lifetime warranty
Box Contents		
	FLIR digital multimeter with integral probe holder, 2 AAA batteries, silicone test leads, soft carrying case	FLIR digital multimeter with integral probe holder, 2 AAA batteries, silicone test leads, alligator clips, soft carrying case

Ordering Information	Order #
FLIR DM66 Electrical and Field Service TRMS Multimeter with VFD mode	793950381663
FLIR DM62 TRMS Digital Multimeter with Non-Contact Voltage	793950381625
For a complete list of available accessories, go to: flir.com/store/instruments/testaccessories	

ACCESSORIES

- TEST LEADS AND PROBES
  - CAT IV Insulated Alligator Probes (TA70)
  - CAT IV Silicone Test Leads (TA80)
  - Thermocouple Probe with Adapter (TA60)
- CASES AND POUCHES
  - TA 16
  - Universal Soft Sided Case (TA15)
- BATTERIES AND POWER
  - NiMH Rechargeable Battery Kit (TA03-KIT)
- MOUNTS AND HOUSINGS
  - Magnetic Meter Mount (TA52)
- STRAPS AND HOLSTERS
  - Magnetic Hanging Strap (TA50)
- Universal Flex Current Probe
  - FLIR TA72
  - FLIR TA74

FLIR DM64

HVAC TRMS Digital Multimeter

The FLIR DM64 is the right choice for professionals who install, inspect, and maintain HVAC systems. It includes microamp measurement to test flame sensors, LoZ mode to prevent ghost voltage, measures capacitance and frequency, and features a Type-K thermocouple input for temperature measurement. A flashing backlight and audible indication simplify the task of checking wiring connections and switch operation in noisy work environments; and probe-contact voltage detection helps you more precisely identify live wires.

FLIR DM64

HVAC TRMS Digital Multimeter

RICH FEATURES FOR HVAC PROFESSIONALS

- Diagnose complex systems with high- and low-voltage measurement capabilities, test flame sensors with microamps, assess temperatures up to 400°C, and identify live wires.

MAKES YOUR JOB EASIER

- Features an intuitive on-screen menu system and enhanced ergonomics; Relative Zero mode helps you identify deviations from normal conditions.

TOUGH, STABLE, AND HIGH QUALITY

- The DM64 is durable and drop-tested with an IP40 rating to last you for years.

FLIR DM64

Specifications

Measurement	DM64	
True RMS	Yes	
	Range	Basic Accuracy
AC / DC Volts	600.0 V	±1% / 0.4%
AC / DC mVolt	600.0 mV	±1% / 0.4%
VFD AC Volts	600.0 V RMS	±1%
AC / DC LoZ V	600.0 V	±2.0%
AC / DC Amps	10.00 A	±1.5% / 1.0%
AC / DC mAmps	600.00 mA	±1.0% / 0.7%
AC / DC µAmps	6000 µA	±1.5% / 1.0%
Resistance	60.00 MΩ	±0.9%
Capacitance	2000 µF	±1.5%
Diode Test	3.000 V	±0.9%
Frequency Counter	5.00 kHz	±0.1%
Temperature, Type-K Thermocouple	-40.0 to 752.0°F -40.0 to 400.0°C	±1.0% + 2°F ±1.0% + 1°C
Additional Measurements		
Continuity Check	30 Ω and 480 Ω	
Measuring Rate	5 samples per second	
Min/Max/Avg	Yes	
Relative Mode	Yes	
LoZ Mode	Yes	
Non-Contact Voltage Detection (NCV)	Yes	
Data Hold	Yes	

General Information	
Auto Power Off	Yes
Battery	2 AAA batteries
Drop Test	2 meters
IP Rating	IP40
Category Rating	CAT IV-300V, CAT III-600V
Size (H x W x L)	161 × 80 × 50 mm (6.3 × 3.2 × 2.0 in)
Weight	334 g (11.8 oz)
Warranty	Limited lifetime warranty
Box Contents	
	DM64 multimeter, 2x AAA Alkaline batteries, silicone test leads, Type-K thermocouple, soft carrying case

Ordering Information	Order #
FLIR DM64 HVAC TRMS Digital Multimeter with Temperature	793950381649
For a complete list of available accessories, go to: flir.com/store/instruments/testaccessories	

ACCESSORIES

- TEST LEADS AND PROBES
  - CAT IV Insulated Alligator Probes (TA70)
  - CAT IV Silicone Test Leads (TA80)
  - Thermocouple Probe with Adapter (TA60)
- CASES AND POUCHES
  - TA 16
  - Universal Soft Sided Case (TA15)
- BATTERIES AND POWER
  - NiMH Rechargeable Battery Kit (TA03-KIT)
- MOUNTS AND HOUSINGS
  - Magnetic Meter Mount (TA52)
- STRAPS AND HOLSTERS
  - Magnetic Hanging Strap (TA50)
- Universal Flex Current Probe
  - FLIR TA72
  - FLIR TA74

FLIR DM62

TRMS Digital Multimeter with Non-contact Voltage

The DM62 offers essential measurement features including True RMS AC/DC voltage and current, non-contact voltage detection, VFD mode, and extended voltage measurement range up to 600 V. Whether you're a commercial electrician, electronics technician, or just need the right tool for DIY, the DM62 provides precise measurements and quality construction for everyday use.

FLIR DM62

TRMS Digital Multimeter with Non-contact Voltage

ALL THE FEATURES YOU NEED

- Offers rich features for various electrical applications including AC/DC measurement, safe non-contact voltage detection, a flashing backlight, and audible indicator.

FAST, EFFICIENT TESTING AND TROUBLESHOOTING

- Navigate the meter’s on-screen menu system easily and operate one-handed thanks to the compact design and easy-to-access buttons.

TOUGH, RELIABLE, HIGH QUALITY

- The DM62 is drop-tested, IP40 rated, and has a CAT IV-300V, CAT III-600V safety category rating to ensure safe and accurate operation.

FLIR DM62 / DM66

Specifications

Measurements by Meter	DM62	DM66
Capacitance	–	200.0 nF (±1.5%)
	–	10.00 mF (±4.5%)
AC / DC LoZ Volts	–	600.0 V (±2.0%)
Frequency Counter	–	50.00 kHz (±0.1%)
Temperature, Type-K Thermocouple	–	-40°F to 752.0°F (±1.0% + 2.0°F) -40°C to 400.0°C (±1.0% + 1.0°C)
Measurements-Both Models		
True RMS	Yes	
	Range	Basic Accuracy
AC / DC Volts	600.0 V	±1.0% / 0.4%
AC / DC mVolt	600.0 mV	±1.0% / 0.4%
VFD AC Volts	600.0 V	±1.0%
AC / DC Amps	10.00 A	±1.5% / 1.0%
AC / DC mAmps	600.0 mA	±1.0% / 0.7%
AC / DC µAmps	6,000 µA	±1.5% / 1.0%
Resistance	6.000 MΩ	±0.9%
Diode Test	3.000 V	±0.9%

Additional Measurements	DM62	DM66
Continuity Check	30 Ω and 480 Ω	30 Ω and 480 Ω
Measuring Rate	5 samples per second	5 samples per second
General Information		
Auto Power Off	Yes	Yes
Battery	2 AAA batteries	2 AAA batteries
Drop Test	2 m	2 m
IP Rating	IP40	IP40
Safety Category Rating	CAT IV-300V, CAT III-600V	CAT IV-300V, CAT III-600V
Size (H x W x L)	161 × 80 × 50 mm (6.3 × 3.2 × 2.0 in)	161 × 80 × 50 mm (6.3 × 3.2 × 2.0 in)
Weight	334 g (11.8 oz)	334 g (11.8 oz)
Warranty	Limited lifetime warranty	Limited lifetime warranty
Box Contents		
	FLIR digital multimeter with integral probe holder, 2 AAA batteries, silicone test leads, soft carrying case	FLIR digital multimeter with integral probe holder, 2 AAA batteries, silicone test leads, alligator clips, soft carrying case

Ordering Information	Order #
FLIR DM66 Electrical and Field Service TRMS Multimeter with VFD mode	793950381663
FLIR DM62 TRMS Digital Multimeter with Non-Contact Voltage	793950381625
For a complete list of available accessories, go to: flir.com/store/instruments/testaccessories	

ACCESSORIES

- TEST LEADS AND PROBES
  - CAT IV Insulated Alligator Probes (TA70)
  - CAT IV Silicone Test Leads (TA80)
  - Thermocouple Probe with Adapter (TA60)
- CASES AND POUCHES
  - TA 16
  - Universal Soft Sided Case (TA15)
- BATTERIES AND POWER
  - NiMH Rechargeable Battery Kit (TA03-KIT)
- MOUNTS AND HOUSINGS
  - Magnetic Meter Mount (TA52)
- STRAPS AND HOLSTERS
  - Magnetic Hanging Strap (TA50)
- Universal Flex Current Probe
  - FLIR TA72
  - FLIR TA74

Multimeters Accessories

TA80
CAT IV Silicone Test Leads

301-25-651

TA70
CAT IV Insulated Alligator Probes

301-25-649

TA60
Thermocouple Probe with Adapter

301-25-648

TA50
Magnetic Hanging Strap

301-25-646

TA52
Magnetic Meter Mount

301-25-647

TA42
Belt Clip

301-25-645

TA72
10 Inch Universal Flex Current Probe

301-25-650

TA74
18 Inch Universal Flex Current Probe

301-16-401

TA10
Protective Case

301-25-639

TA10-F
Protective Case

301-25-640

TA15
Universal Soft Sided Case

301-25-644

TA16
Soft Protective Case

TA04
Lithium Polymer Rechargeable Battery Kit

301-25-638

TA03
NiMH Rechargeable Battery Kit

301-25-637

TA11
Protective Case

301-25-641

TA17
Soft Pouch for Clamp Meters

TA83
Replacement Test Leads

301-60-862

Comparison Guide DM

MARKET	GENERAL PURPOSE	PROFESSIONAL					INDUSTRIAL			INSULATION
Model	FLIR DM62	FLIR DM64	FLIR DM66	FLIR DM166	FLIR DM90	FLIR DM91	FLIR DM285	FLIR DM92	FLIR DM93	FLIR IM75
IGM Resolution	—	—	—	80 x 60	—	—	160 x 120	—	—	—
IGM Temperature Range	—	—	—	-10°C to 150°C (14°F to 302°F)	—	—	-10°C to 150°C (14°F to 302°F)	—	—	—
Display Counts/Type	6,000/Backlit LCD	6,000/Backlit LCD	6,000/Backlit LCD	6,000/2.4" TFT	6,000/Backlit LCD	6,000/Backlit LCD	6,000/2.8"TFT	40,000/Backlit LCD	40,000/Backlit LCD	4,000/40,000/ Backlit LCD
Bar Graph	—	—	—	—	•	•	•	•	•	•
Basic Accuracy (DCV)	±0.4%	±0.4%	±0.4%	±0.5%	±0.09%	±0.09%	±0.09%	±0.05%	±0.05%	±0.1%
True RMS AC/DC Voltage	600 V	600 V	600 V	600 V	1,000 V	1,000 V	1,000 V	1,000 V	1,000 V	1,000 V
True RMS AC/DC Current	10 A	10 A	10 A	10 A	10 A	10 A	10 A	10 A	10 A	—
AC/DC µA Current	•	•	•	•	•	•	•	—	—	—
Resistance	60 MΩ	60 MΩ	60 MΩ	60 MΩ	50 MΩ	50 MΩ	50 MΩ	40 MΩ	40 MΩ	Insulation: 20 GΩ Earth Bond: 40 kΩ
Capacitance	—	10 mF	10 mF	10 mF	10 mF	10 mF	10 mF	40 mF	40 mF	10 mF
Frequency	—	50 kHz	50 kHz	50 kHz	100 kHz	100 kHz	100 kHz	100 kHz	100 kHz	40 kHz
Temperature	—	-40°C to 400°C (-40°F to 752°F)	-40°C to 400°C (-40°F to 752°F)	-40°C to 400°C (-40°F to 752°F)	-40°C to 400°C (-40°F to 752°F)	-40°C to 400°C (-40°F to 752°F)	-40°C to 400°C (-40°F to 752°F)	-200°C to 1200°C (-328°F to 2192°F)	-200°C to 1200°C (-328°F to 2192°F)	—
Data Hold	•	•	•	•	•	•	•	•	•	•
Relative	•	•	•	•	•	•	•	•	•	—
Min/Max/Average	•	•	•	•	•	•	•	•	•	—
LoZ Mode	—	•	•	—	•	•	•	•	•	—
Peak	—	—	—	—	•	•	•	•	•	—
Low Pass Filter/VFD	•	•	•	•	•	•	•	•	•	•
Ingress Protection (IP)/ Drop Proof	IP40/2 m	IP40/2 m	IP40/2 m	IP40/3 m	IP54/3 m	IP40/3 m	IP40/3 m	IP54/3 m	IP54/3 m	IP54/3 m
Non-Contact Voltage Detection (NCV)	•	•	•	•	•	•	•	—	—	—
Worklights	—	—	—	—	•	•	•	•	•	•
Data Storage	—	—	—	—	—	40,000 readings	10 Sets (40,000 readings each) and 100 images	Store/Recall 99 readings	Store/Recall 99 readings	Store/Recall 99 readings
Bluetooth/METERLiNK®	—	—	—	—	—	•	•	—	•	•
Safety Category	CAT III-600 V CAT IV-300 V	CAT III-600 V CAT IV-300 V	CAT III-600 V CAT IV-300 V	CAT III-600 V CAT IV-300 V	CAT III-1000 V CAT IV-600 V	CAT III-1000 V CAT IV-600 V	CAT III-1000 V CAT IV-600 V	CAT III-1000 V CAT IV-600 V	CAT III-1000 V CAT IV-600 V	CAT III-1000 V CAT IV-600 V

Environmental Meter

FLIR EM54
HVAC/R Environmental Meter

301-42-013

Extech AN250W
Anemometer with Connectivity to ExView® App

Extech LT250W
Light Meter with Connectivity to ExView® App

Extech RH250W
Hygro-Thermometer with Connectivity to ExView® App

Extech RPM250W
Laser Tachometer with Connectivity to ExView® App

Extech SL250W
Sound Meter with Connectivity to ExView® App

FLIR EM54

HVAC/R Environmental Meter

The FLIR EM54 is ideal for inspecting and troubleshooting HVAC/R ducting systems within residential, commercial, and industrial facilities. This meter can help you verify that duct inlets and outlets have the specified volumetric flow – a prerequisite to an efficient functional system. Featuring humidity, wet bulb, and dew point functions, the EM54 can measure deviations from proper relative humidity levels. Plus, the included Type-K contact temperature probe is useful to check electric motors and thermal equipment components for proper operating temperatures.

FLIR EM54

HVAC/R Environmental Meter

ACCURATE AND RELIABLE

- Receive high-quality data consistently, and work without interruption. Using the tripod, place the meter away from objects that may influence relative humidity measurements.

INSPECT AND TROUBLESHOOT EFFICIENTLY

- Work on a wide range of systems more efficiently using the contact temperature probe and wet bulb/dew point calculations.

EASY TO USE

- Intuitively operate this simple, ergonomic meter with a backlit display, a ‘hold’ function that freezes readings, and well-marked function keys.

FLIR EM54

HVAC/R Environmental Meter

Environmental Measurements	Range	Accuracy
Air Velocity, Vane Anemometer Probe	0.4 to 30 m/s 79 to 5906 ft/min 1.4 to 108.0 km/h 0.9 to 67.2 mph 0.8 to 58.3 knots	±3% +0.2 m/s ±3% +40 ft/min ±3% +0.8 km/h ±3% +0.4 mph ±3% +0.4 knots
Air Flow	0 to 999900 CMM (0 to 999900 CFM)	
Air Temperature	10 to 30°C (50 to 86°F) -30 to 9.9°C (-22 to 50°F) and 31 to 60°C (88 to 140°F)	±1°C (1.8°F) ±2°C (3.6°F)
Air Relative Humidity	5% to 98%	±3.5%
Dew Point (Calculated)	-30 to 60°C (-22 to 140°F)	±3°C (4.8°F)
Wet Bulb (Calculated)	-30 to 50°C (-22 to 122°F)	±3°C (4.8°F)
Contact Temperature, Type K Thermocouple	-99.9 to 99.9°C (-148 to 212°F)	±1.5% +1°C (1.8°F)
	100 to 1372°C (212 to 2502°F)	±1.5% +2°C (3.6°F)

General Information	
Display	Backlit, multifunction LCD
Warranty	Limited 3 years
Battery Type	1x 9 V included
Battery Life	120 hours typical
Battery Status Indicator	Low battery indication
Auto Power Off (APO)	Configurable from 5 to 60 min in 8 increments
Operating Temperature	0 to 50°C (32 to 122°F)
Storage Temperature	-10 to 60°C (14 to 140°F)
Certifications	CE, RCM
Drop Test	1 m (3.3 ft), not including removeable probes
Accessory Mount	Standard ¼-in - 20 mount for accessory
Housing Material	Impact-resistant plastic
Weight	283.9 g (10 oz) with battery installed, no external probes
Box Contents	EM54 Environmental Meter, vane anemometer probe, Type-K thermocouple, soft carrying case, 9 V battery, tripod

Dimensions	
Main Unit	275 x 65 x 45 mm (10.8 x 2.6 x 1.8 in)
Anemometer Body Length	150 mm (5.9 in)
Anemometer Cable Length	950 mm (37.4 in)
Anemometer Vane Diameter	70 mm (2.8 in)

Extech AN250W

Anemometer with Connectivity to ExView® App

The AN250W is a compact airflow meter with Bluetooth® connectivity, which allows building, HVAC, and maintenance professionals to view and share air velocity and temperature data directly from a mobile device using the free ExView app. With the capability to capture data, display trends, set visual and audio alarms, and create and send reports, users can gain deeper insights on environmental conditions and building health. The AN250W is part of the Extech 250W Connected Series of products that can improve your ability to evaluate problems and report on them from the field. This allows you to improve the speed and quality of decisions to address critical issues immediately.

Extech AN250W

Anemometer with Connectivity to ExView® App

EASY, FLEXIBLE OPERATION

- View data on both the large backlit LCD display and from iOS® or Android™ mobile devices using the ExView app via Bluetooth.

STANDALONE CAPTURE AND DISPLAY

- Simultaneously monitor air velocity and temperature data, record max/avg readings, and freeze the display with ‘data hold’ feature.

PORTABLE COLLECTION, ANALYSIS, AND REPORTING

- Export .CSV data; create and send PDF reports including photos of the measurement location taken with a connected smartphone or tablet camera.

Extech AN250W

Anemometer with Connectivity to ExView® App

Specifications	Range	Max Resolution	Basic Accuracy
Air Velocity			
ft/min	295.2 to 5905 ft/min	1 ft/min	±5% FS
m/s	1.5 to 30 m/s	0.1 m/s	±5% FS
km/h	5.4 to 108 km/h	0.1 km/h	±5% FS
mph	3.3 to 67 mph	0.1 mph	±5% FS
knots	2.9 to 58 knots	0.1 knots	±5% FS
Beaufort Force	0 to 12	1	±1
Air Temperature (ambient)	¬10 to 50°C (14 to 122°F)	0.1°C (0.2°F)	±2°C (±4°F)
Sampling Rate	0.5 sec		
Connectivity	Bluetooth (Free ExView App)		
ExView App Compatibility	iOS 13.0 and higher; Android 9.0 and higher		
Transmission Distance	>10 m up to 90 m line of sight		
Power	3x AAA (1.5 V) battery (included)		
Operating Condition	0°C to 40°C (32°F to 104°F), ≤80% RH		
Dimensions/ Weight	6.9 × 2.1 × 1.1 in (176 × 53 × 28 mm) / 3.2 oz (91.8 g)		

Extech LT250W

Light Meter with Connectivity to ExView® App

The LT250W is a compact light meter with Bluetooth® connectivity, which allows building and maintenance professionals to view and share light intensity data directly from a mobile device using the free ExView app. With the capability to capture data, display trends, set visual and audio alarms, and create and send reports, users can gain deeper insights on workplace comfort and building health. The LT250W is part of the Extech 250W Connected Series of products that can improve your ability to evaluate problems and report on them from the field. This allows you to improve the speed and quality of decisions to address critical issues immediately

Extech LT250W

Light Meter with Connectivity to ExView® App

EASY, FLEXIBLE OPERATION

- View data on both the large backlit LCD display and from iOS® or Android™ mobile devices using the ExView app via Bluetooth.

STANDALONE CAPTURE AND DISPLAY

- Measure light intensity data up to 100,000 Lux (10,000 Fc), record max/min readings, and freeze the display with ‘data hold’ feature.

PORTABLE COLLECTION, ANALYSIS, AND REPORTING

- Export .CSV data; create and send PDF reports including photos of the measurement location taken with a connected smartphone or tablet camera.

Extech LT250W

Light Meter with Connectivity to ExView® App

Specifications	Range	Max Resolution	Basic Accuracy
Foot-Candle (Fc)	0 to 9999 Fc	1 Fc	±4% rdg
	≥10,000 Fc	10 Fc	±5% rdg
Lux	0 to 9999 Lux	1 Lux	±4% rdg
	≥10000 Lux	10 Lux	±5% rdg
	≥100,000 Lux	100 Lux	±5% rdg
Sampling Rate	0.5 sec		
Display	9999 count (backlit LCD)		
Connectivity	Bluetooth (Free ExView App)		
ExView App Compatibility	iOS 13.0 and higher & Android 9.0 and higher		
Transmission Distance	>10 m up to 90 m line of sight		
Power	3 x AAA (1.5 V) battery (included)		
Operating Condition	0 to 40°C (32 to 104°F), ≤80% RH		
Dimensions/ Weight	6.9 × 2.1 × 1.1 in (176 × 53 × 28 mm) / 3.2 oz (90 g)		

Extech RH250W

Hygro-Thermometer with Connectivity to ExView® App

The RH250W is a compact hygro-thermometer with Bluetooth® connectivity, which allows building and maintenance professionals to view and share relative humidity and temperature data directly from a mobile device using the free ExView app. With the capability to capture data, display trends, set visual and audio alarms, and create and send reports, users can gain deeper insights on equipment and building health. The RH250W is part of the Extech 250W Connected Series of products that can improve your ability to evaluate problems and report on them from the field. This allows you to improve the speed and quality of decisions to address critical issues immediately.

Extech RH250W

Hygro-Thermometer with Connectivity to ExView® App

EASY, FLEXIBLE OPERATION

- View data on both the large backlit LCD display and from iOS® or Android™ mobile devices using the ExView app via Bluetooth.

STANDALONE CAPTURE AND DISPLAY

- Simultaneously monitor relative humidity and temperature data, record max/min readings, and freeze the display with ‘data hold’ feature.

PORTABLE COLLECTION, ANALYSIS, AND REPORTING

- Export .CSV data; create and send PDF reports including photos of the measurement location taken with a connected smartphone or tablet camera.

Extech RH250W

Hygro-Thermometer with Connectivity to ExView® App

Specifications	Range	Max Resolution	Basic Accuracy
Relative Humidity	0 to 100% RH	0.1% RH	±5% RH
Air Temperature (ambient)	-10 to 60°C (14 to 140°F)	0.1°C (0.2°F)	±1.0°C (±2.0°F)
Response Time	1 sec		
Connectivity	Bluetooth (Free ExView App)		
ExView App Compatibility	iOS 13.0 and higher & Android 9.0 and higher		
Transmission Distance	>10 m up to 90 m line of sight		
Power	3 x AAA (1.5 V) battery (included)		
Operating Condition	0 to 40°C (32 to 104°F), ≤80% RH		
Dimensions/ Weight	5.9 × 2.1 × 1.1 in (150 × 53 × 28 mm) / 2.8 oz (80.5 g)		

Extech RPM250W

Laser Tachometer with Connectivity to ExView® App

The RPM250W is a compact Laser Tachometer with Bluetooth® connectivity, which allows building and maintenance professionals to view and share revolutions per minute (RPM) data of rotating objects directly from a mobile device using the free ExView app. With the capability to capture data, display trends, set visual and audio alarms, and create and send reports, users can gain deeper insights on equipment. The RPM250W is part of the Extech 250W Connected Series of products that can improve your ability to evaluate problems and report on them from the field. This allows you to improve the speed and quality of decisions to address critical issues immediately.

Extech RPM250W

Laser Tachometer with Connectivity to ExView® App

EASY, FLEXIBLE OPERATION

- View data on both the large backlit LCD display and from iOS® or Android™ mobile devices using the ExView app via Bluetooth.

STANDALONE CAPTURE AND DISPLAY

- Take non-contact RPM measurements of rotating objects up to 500 mm (1.64 ft) and count up to 99,000; freeze the display with ‘data hold’ feature.

PORTABLE COLLECTION, ANALYSIS, AND REPORTING

- Export .CSV data; create and send PDF reports including photos of the measurement location taken with a connected smartphone or tablet camera.

Extech RPM250W

Laser Tachometer with Connectivity to ExView® App

Specifications	Range	Max Resolution	Basic Accuracy
RPM Range	10 to 9999.9 RPM	0.1 RPM	±0.04%
	10000 to 99999 RPM	1 RPM	±0.04%
Count Range	0 to 99999 counts	1 count	±2 dgts
Target Distance	50 to 500 mm (2 in to 1.64 ft)		
Sampling Rate	1 s (over 120 RPM)		
Sensor Type	Photodiode and laser tube		
Display	5-digit (9999 count) backlit LCD display		
Connectivity	Bluetooth (Free ExView App)		
ExView App Compatibility	iOS 13.0 and higher; Android 9.0 and higher		
Transmission Distance	>10 m up to 90 m line of sight		
Measuring Angle	±30° from perpendicular		
Power	3 x AAA (1.5 V) battery (included)		
Operating Condition	0 to 40°C (32 to 104°F), ≤80% RH		
Dimensions/Weight	4.7 × 2.1 × 1.1 in (120 × 53 × 28 mm) / 2.9 oz (81.6 g)		

Extech SL250W

Sound Meter with Connectivity to ExView® App

The SL250W is a compact Sound Meter with Bluetooth® connectivity, which allows building and maintenance professionals to view and share sound level data (30 to 130 dB) directly from a mobile device using the free ExView app. With the capability to capture data, display trends, set visual and audio alarms, and create and send reports, users can gain deeper insights workplace comfort and public health. The SL250W is part of the Extech 250W Connected Series of products that can improve your ability to evaluate problems and report on them from the field. This allows you to improve the speed and quality of decisions to address critical issues immediately.

Extech SL250W

Sound Meter with Connectivity to ExView® App

EASY, FLEXIBLE OPERATION

- View data on both the large backlit LCD display and from iOS® or Android™ mobile devices using the ExView app via Bluetooth.

STANDALONE CAPTURE AND DISPLAY

- Measure sound level from 30 to 130 dB with ‘A’ weighted frequency for human hearing, record max/min readings, and freeze the display with ‘data hold’ feature.

PORTABLE COLLECTION, ANALYSIS, AND REPORTING

- Export .CSV data; create and send PDF reports including photos of the measurement location taken with a connected smartphone or tablet camera.

Extech SL250W

Sound Meter with Connectivity to ExView® App

Specifications	Range
Sound Level	30 to 130 dB
Max Resolution	0.1 dB
Basic Accuracy	±1.5 dB
Weighting	A
Response Time	Fast / Slow
Sampling Rate	Fast: 125 ms (8 times/s) Slow: 1000 ms (1 time/s)
Frequency Response	31.5 Hz to 8 kHz
Connectivity	Bluetooth (Free ExView App)
ExView App Compatibility	iOS 13.0 and higher; Android 9.0 and higher
Transmission Distance	>10 m up to 90 m line of sight
Power	3 x AAA (1.5 V) battery (included)
Operating Condition	0 to 40°C (32 to 104°F), ≤80% RH
Dimensions/Weight	6 × 2.1 × 1.1 in (153 × 53 × 28 mm) / 3 oz (84.6 g)

Insolation Testers

FLIR IM75

Insulation & DMM Combo with METERLiNK®

301-63-459

FLIR IM75

Insulation & DMM Combo with METERLiNK®

The FLIR IM75 is both a premier handheld insulation tester and advanced multifunction digital multimeter for installation, troubleshooting, and maintenance professionals. The IM75 includes several specialty insulation modes including Polarization Index, Dielectric Absorption, and Earth Bond Resistance. Insulation tests can be performed instantly, continuously, and over a timed duration for in-depth assessment. The meter features METERLiNK® to embed electrical measurements into thermal images captured by FLIR infrared cameras, and Bluetooth® to view real-time readings remotely.

FLIR IM75

Insulation & DMM Combo with METERLiNK®

DMM AND INSULATION TESTER COMBO

- All the functions you need in one tool including multiple resistance ranges for insulation test levels and wireless capabilities.

TRUE MEASUREMENTS, RELIABLE PERFORMANCE

- Provides features for advanced insulation tests including True RMS measurements with 1000V range, VFD mode, and three insulation modes.

EFFICIENT ILLUMINATION AND RUGGED DESIGN

- Equipped with bright LED worklights to illuminate test areas and targets, a multi-color LED display, and durable double-molded construction.

FLIR IM75

Specifications

TECHNICAL SUMMARY	MAX RANGE	BASIC ACCURACY
Insulation Resistance	4M to 20GΩ	±1.5%
Insulation Test Voltages	50, 100, 250, 500 and 1000V	±3.0%
DC Voltage	1000.0V	±0.1%
AC Voltage	1000.0V	±1.5%
VFD AC Voltage	1000.0V	±1.5%
Earth Bond Resistance	40Ω to 40KΩ	±1.5%
Capacitance	10 mF	±1.2%
Frequency (ACV)	40kHz	+/- 5 digits
Diode Test	2V	±1.5%
Continuity	400.0Ω	±0.5%
GENERAL INFORMATION		
IP Rating, Drop Test	IP 54, 2m (6.6')	
Category Rating	CAT III-1000V, CAT IV-600V	
Bluetooth Range	10m (32')	
Battery Type	6 x AAA	
Memory	99 internal storage locations	
Operating Temperature	32 to 122°F (0 to 50°C)	
Warranty	Limited Lifetime*	

ACCESSORIES

- TEST LEADS AND PROBES
  - CAT IV Insulated Alligator Probes (TA70)
  - CAT IV Silicone Test Leads (TA80)
- CASES AND POUCHES
  - Protective Case (TA10)
  - TA 16
  - Universal Soft Sided Case (TA15)
- BATTERIES AND POWER
  - NiMH Rechargeable Battery Kit (TA03-KIT)
- MOUNTS AND HOUSINGS
  - Magnetic Hanging Strap(TA50)

Moisture Meters

FLIR MR277

Building Inspection System with Moisture Hygrometer & MSX® IR Camera

301-79-404

FLIR MR265

Moisture Meter and Thermal Imager with MSX®™

302-25-441

FLIR MR176

IGM™ Moisture Meter with Replaceable Hygrometer

301-25-633

FLIR MR160

IGM™ Moisture Meter

300-20-437

FLIR MR77

5-in-1 Moisture Meter with METERLiNK™

110-81-662

FLIR MR60

Moisture Meter Pro

301-25-636

FLIR MR59

Ball Probe Moisture Meter with Bluetooth®

301-25-635

FLIR MR55

Pin Moisture Meter with Bluetooth®

301-25-634

FLIR MR40

Moisture Pen + Flashlight

301-16-400

Accessories

FLIR MR277

Building Inspection System with Moisture Hygrometer & MSX® IR Camera

The FLIR MR277 is an accurate, easy-to-use, all-in-one tool for quickly locating moisture and building envelope issues. This professional moisture meter combines the advantages of Infrared Guided Measurement (IGM™) with FLIR Multi-Spectral Dynamic Imaging (MSX®) and advanced environmental sensors to help you locate, identify, and document problems. The integrated pinless moisture sensor provides fast, non-invasive readings which you can then confirm with the external pin probe. Features such as the built-in hygrometer and the field-re- placeable temperature/relative-humidity sensor expedite troubleshooting, while METERLiNK® allows you to connect to mobile devices and upload data to the FLIR Tools® app for reporting.

FLIR MR277

Building Inspection System with Moisture Hygrometer & MSX® IR Camera

LOCATE PROBLEM AREAS FASTER

- Clearly see areas of concern with a high- performance 160 × 120 thermal imaging sensor
- Quickly find suspected problems with IGM technology
- Easily identify both the context and the issue with MSX, which embosses visual details on full thermal images
- Target the exact source of problems with the integrated laser pointer

DIAGNOSE EFFICIENTLY AND ACCURATELY

- Quickly scan for moisture with the integrated non-invasive pinless sensor
- Capture exact measurements with an external pin probe (included) and wide range of optional moisture probes
- Reduce downtime with field-replaceable temperature/humidity sensor
- Calculated parameters based on multi-sensor input: grains per pound or grams per kilogram, vapor pressure, and dew point

DO MORE IN LESS TIME

- Create a single file documenting comprehensive thermal and visual imagery with hygrometer readings and laser location
- Download images and data wirelessly or using the included USB cable
- Analyze images and quickly generate reports with free FLIR Tools software
- Easy to use with intuitive interface

FLIR MR277

Building Inspection System with Moisture Hygrometer & MSX® IR Camera

Thermal imaging	
Thermal image resolution	160 × 120 (19,200 pixels)
Spectral response	8 µm to 14 µm
Field of view (W × H)	55° × 43°
Sensitivity	<70 mK
Object temperature range	0°C to 100°C (32°F to 212°F)
Image update speed frequency	9 Hz
Image modes and displays	
Thermal image palettes	Iron, Rainbow, Arctic, White-hot, Black-hot
MSX®	Adds visual details to full resolution thermal image
Image modes	Thermal, visual, MSX®
Internal memory	8 GB
Image gallery	Yes
Display type	QVGA (320 × 240 pixels) 2.8 in. color TFT graphical display
Moisture measurements	
Pin moisture range	7% to 100%
Pin moisture accuracy	±1.5%, 7 to 30% Reference only: 30 to 100%
Pin moisture groups	11 material groups
Pinless moisture range and accuracy	0 to 100; relative
Pinless measurement depth	Max of 19 mm (0.75 in)
Measurement resolution	0.1
Response time pinless mode	100 ms
Response time pin mode	750 ms
Environmental measurements	
Relative humidity range	0% to 100% RH
Relative humidity basic accuracy	±2.5%
Relative humidity detailed accuracy	±4.7% (0% to 10% RH), ±2.5% (10% to 90% RH), ±4.7% (90% to 100% RH)
Air temperature range	0°C to 50°C (32°F to 122°F)
Air temperature accuracy	±0.6°C (±1.1°F)
Dew point	-30°C to 50°C (-22°F to 122°F)
Dew point basic accuracy	±1.0°C (±1.8°F)
Vapor pressure	0 to 12.0 kPa
Vapor pressure basic accuracy	±0.05 kPa

Mixing ratio range	0 to 80.0 g/kg (0 to 560 GPP)
Mixing ratio basic accuracy	0.25 g/kg (±2 GPP)
General information	
Saved image file format	Radiometric jpeg
Stored image capacity	15,000 Images
Digital camera	2 MP
Digital camera field of view (FOV)	83° (70.5° HFOV × 56° VFOV)
Language options	22
Laser type	Visible class 2, single laser pointer to center of thermal image
Power system	
Continuous run time	16 hours maximum
Typical usage	4 work weeks
Auto power off	Programmable: off, 1, 5, or 20 minutes
Battery	Rechargeable 4.2 V, 5400 mAh LiPo
Certifications	
Certification standards	EN 61326 (EMC), EN 60825-1 Class 2 (laser), IEC61010-1
Agency approvals	CE, FCC Class B, RCM
Environmental and physical data	
Operating temperature	-20°C to 60°C (-4°F to 140°F)
Storage temperature	-20°C to 45°C (-4°F to 113°F)
Operating humidity	5% to 95%
Storage humidity	90% relative humidity (no condensation)
Drop test	2 m (6.6 ft)
Weight:	406 g (14.3 oz)
Size (L × W × H)	16 × 8.5 × 4.4 cm (6.2 × 3.3 × 1.7 in)
Shipping information	
Packaging contents	FLIR MR277, FLIR MR13 Replaceable Temperature and Relative Humidity Sensor, FLIR MR02 Standard Moisture Pin Probe, quick start guide, international USB charger, USB cable, and lanyard

ACCESSORIES

- PROBES
  - Baseboard Probe (MR09)
  - Extension Pole (MR04)
  - Hammer and Wall Cavity Probe Combo (MR08)
  - Hammer Probe (MR07)
  - Wall Cavity Probe (MR06)
- CASES AND POUCHES
  - MR10-2_Protective Case for FLIR Moisture Meters
- SENSORS
  - Ball Probe Moisture Sensor (MR12)
  - Handheld Temperature/Humidity Sensor (MR11)
  - MR13_Temperature and Humidity Sensor
  - Temperature / RH Sensor and Extension Assembly (MR01-EXT)
- PINS
  - 2" pins, 1 pair (MR-PINS2)
  - 2" pins, 10 pairs (MR-PINS2-10)
  - 4" pins, 1 pair (MR-PINS4)
  - 6" pins, 1 pair (MR-PINS6)
  - Impact Pin Moisture Probe (MR05)
  - Replaceable External Moisture Pin Probe (MR02)

FLIR MR265

Moisture Meter and Thermal Imager with MSX®

The FLIR MR265 is a combination pin and pinless moisture meter with thermal imaging designed to show building and facilities maintenance professionals exactly where to investigate issues related to moisture, air leaks, and insulation voids. Featuring FLIR IGM™ (Infrared Guided Measurement) technology, the MR265 helps users quickly scan and target problem areas, visually guiding them to the spot where they can confidently take measurements, analyze readings, and ensure that problems are fixed. FLIR MSX (Multi-Spectral Dynamic Imaging enhancement) technology makes it easy to recognize where issues are located by embossing visual details from the built-in visual camera onto thermal images. Using FLIR Thermal Studio™, inspectors can then create and share professional reports that include findings and proof of repairs – giving customers peace of mind that mold, rot, or moisture challenges have been resolved.

FLIR MR265

Moisture Meter and Thermal Imager with MSX®

GET TO THE PROBLEM FASTER

Visually scan and investigate large areas for moisture, air leaks, and other building issues without opening the wall

- Pinpoint problems at the source using the 160 × 120 (19,200 pixels) built-in thermal camera and laser
- Clearly identify the inspection area using the onboard 2 MP visible camera
- Eliminate guesswork with MSX, which enhances image quality by embossing visible light details onto thermal images in real time for greater edge and outline detail
- Conveniently evaluate issues while in the field on the large 2.8-inch display

WORK SMARTER

Carry fewer tools with this convenient, all-in-one thermal camera, worklight, and pinless and pin moisture meter that meets RESNET standards

- Take qualitative, non-destructive measurements using the built-in electromagnetic/capacitive pinless moisture sensor
- Use the included pin probe resistive sensor for quantifiable moisture measurements
- Built rugged to withstand up to a 2 m (6.6 ft) drop
- Inspect in dimly lit areas using the bright, built-in worklight

IMPROVE COMMUNICATION WITH CUSTOMERS

Create professional reports using FLIR Thermal Studio to better communicate problems and repairs to customers

- Upload images into FLIR Thermal Studio to take advantage of professional thermography analysis capabilities, or use the jpeg in a software platform of choice
- Document both thermal and visual images before and after repairs to clearly show clients what problems were found, and prove that problems were fixed
- Save up to 15,000 visual and radiometric thermal images

FLIR MR265

Moisture Meter and Thermal Imager with MSX®

Thermal Imaging	
Thermal image resolution	160 × 120 (19,200 pixels)
Spectral response	8 µm to 14 µm
Field of view (W × H)	57° × 44°
Sensitivity	<150 mK
Object temperature range	0°C to 100°C (32°F to 212°F)
Emissivity correction	3 pre-set and 1 custom emissivity setting
Image update speed frequency	9 Hz
Image Modes and Displays	
Thermal image palettes	Iron, Rainbow, Arctic, White-hot, Black-hot
MSX®	Adds visual details to full resolution thermal image
Image modes	Thermal, Visual, MSX
Internal memory	8 GB
Image gallery	Yes
Display type	QVGA (320 × 240 pixels) 2.8-in color TFT graphical display
Moisture Measurements	
Pin moisture range	7% to 100%
Pin moisture accuracy	±1.5%, 7% to 30%, Reference only: 30% to 100%
Pin moisture groups	11 material groups
Pinless moisture range and accuracy	0 to 100; relative
Pinless measurement depth	Max of 19 mm (0.75 in)
Measurement resolution	0.1
Response time pinless mode	100 ms
Response time pin mode	750 ms

General Information	
Saved image file format	Radiometric jpg
Stored image capacity	15,000 Images
Digital camera	2 MP
Digital camera field of view (FOV)	83° (70.5° HFOV × 56° VFOV)
Language options	22
Laser type	Visible class 2, single laser pointer to center of thermal image
Warranty	Limited 10-Year Warranty
Power System	
Continuous run time	10 hours maximum
Typical usage	4 work weeks
Auto power off	Programmable: off, 5, 10, 20 and 30 minutes
Battery	Rechargeable 3.7 V nominal, 5400 mAh LiPo
Certifications	
Certification standards	EN 61326 (EMC), EN 60825-1 Class 2 (laser), IEC61010-1
Agency approvals	CE, RCM, FCC Part 15B, UKCA
Environmental and Physical Data	
Operating temperature	0°C to 45°C (32°F to 113°F)
Storage temperature	-20°C to 60°C (-4°F to 140°F)
Operating humidity	10% to 90%
Storage humidity	90% relative humidity (no condensation)
Drop test	2 m (6.6 ft)
Weight	392 g (0.7 lb)
Size (L × W × H)	17.7 × 8.9 × 3.6 cm (6.97 × 3.5 × 1.43 in)
Shipping Information	
Packaging contents	FLIR MR265, FLIR MR02 Standard Moisture Pin Probe, quick start guide, international USB charger, USB cable, and lanyard

ACCESSORIES

- PROBES
  - Baseboard Probe (MR09)
  - Extension Pole (MR04)
  - Hammer and Wall Cavity Probe Combo (MR08)
  - Hammer Probe (MR07)
  - Wall Cavity Probe (MR06)
- CASES AND POUCHES
  - MR10-2_Protective Case for FLIR Moisture Meters
- SENSORS
  - Ball Probe Moisture Sensor (MR12)
- PINS
  - 2" pins, 1 pair (MR-PINS2)
  - 2" pins, 10 pairs (MR-PINS2-10)
  - 4" pins, 1 pair (MR-PINS4)
  - 6" pins, 1 pair (MR-PINS6)
  - Impact Pin Moisture Probe (MR05)
  - Replaceable External Moisture Pin Probe (MR02)
- SOFTWARE
  - FLIR Thermal Studio Suite

FLIR MR176

IGM™ Moisture Meter with Replaceable Hygrometer

Featuring Infrared Guided Measurement (IGM) technology powered by a built-in FLIR Lepton® 80 x 60 thermal imaging sensor, the MR176 visually guides you to the precise spot that moisture may be hiding. Use the integrated laser and crosshair to help pinpoint the surface location of the issue found with IGM. An integrated pinless sensor and an external pin probe provide the flexibility to take either non-intrusive or intrusive measurements. A field-replaceable temperature and relative humidity sensor delivers added convenience.

FLIR MR176

IGM™ Moisture Meter with Replaceable Hygrometer

VISUALLY IDENTIFY HIDDEN MOISTURE WITH IGM.

Easily investigate moisture issues and troubleshoot quickly

- An 80 x 60, 4800-pixel Lepton® thermal imager powers IGM technology, visually indicating potential moisture areas via the color display
- Customize thermal images: select which measurements are integrated (moisture, temperature, relative humidity, dew point, vapor pressure, mixing ratio), and choose from one of four color palettes (Iron, Rainbow, Ice, Greyscale); a lock-image setting prevents extreme hot and cold temperatures from interfering with images while scanning for issues
- Equipped with a laser and cross hair to easily reference the exact location of the potential moisture issue seen in the thermal image

GET PRECISE READINGS.

Confidently take measurements and analyze readings

- Field-replaceable temperature/relative humidity sensor can simply be removed from meter and exchanged when needed, so you can continue to work and reduce downtime
- Progressive Environmental Stability Indicator removes response time error when you move through a site to different measurement locations, informing you when the relative humidity readings have reached a steady state
- Integrated pinless moisture measurements for fast detection, and external pin probe included with expandable probe options

CONVENIENT, FLEXIBLE, AND EASY TO OPERATE.

Get more work done in less time

- Rugged, portable design with intuitive menu system
- Document readings and images to share via included USB cable
- Free FLIR Tools PC software quickly generates reports

FLIR MR176

IGM™ Moisture Meter with Replaceable Hygrometer

FLIR MR176: Imaging Moisture Meter		
Imaging Detector	FLIR Lepton microbolometer	
Image Calibration	Automatic with manual lock scale option	
Thermal Image Resolution (W x H)	4800 pixels (80 × 60)	
Spectral Response	8 to 14µm	
Field of View (W x H)	51° × 38°	
Sensitivity	<150mK	
Detection Limit (Wet Area Detection @32ft (10m)	19.7in² (49cm²)	
Image Update Speed Frequency	9Hz	
Thermal Image Palettes	Iron, Rainbow, Ice, Greyscale	
Thermal Image Minimum Focus Distance	4" (10cm)	
Moisture Measurement	**Range**	**Basic Accuracy**
Pin Moisture	7% to 30%	±1.5% MC
	30% to100%	Reference only
Pin Moisture Groups	9 Material Groups	
Pinless Moisture Range	0 to 100	Relative
Pinless Measurement Depth	0.75" (19mm) Max	
Measurement Resolution	0.1	
Response Time Pinless Mode	100ms	
Response Time Pin Mode	750ms	
Environmental Measurement	**Range**	**Basic Accuracy**
Relative Humidity	0 to 100%	2.5%RH
Air Temperature	32 to 122°F (0 to 50°C)	±1.1°F (±0.6°C)
Dew Point	-22 to 122°F (-30 to50°C)	±1.8°F (±1.0°C)
Vapor Pressure	0.0 to 12.0kPa	±0.05kPa
Mixing Ratio	0 to 560GPP (0.0 to 80.0 g/kg)	±2GPP (0.25 g/kg)
General information		
Display Type	QVGA (320 x 240 pixel) 2.3" color TFT graphical display	
Drop Test	3m	
Saved Image File Format	BMP with measurement values overlaid	
Stored Image Capacity	9999 images	
Laser Orientation	Single laser pointer to center of thermal image	
Continuous Run Time	18 hours max	
Typical Usage*	4 work weeks	
Battery	3.7V, 3000mAh Li-ion rechargeable via micro USB	
Certification Standards	EN 61326 (EMC), EN 60825-1 Class 2 (Laser)	
Agency Approvals	CE, FCC Class B, RCM	
Includes	MR01 Replaceable Temperature and Relative Humidity Sensor, MR02 Standard Pin Probe, Quick Start Guide, International USB Charger, USB Cable	

ACCESSORIES

- PROBES
  - Baseboard Probe (MR09)
  - Hammer and Wall Cavity Probe Combo (MR08)
  - Hammer Probe (MR07)
  - Wall Cavity Probe (MR06)
- CASES AND POUCHES
  - MR10-2_Protective Case for FLIR Moisture Meters
- SENSORS
  - Ball Probe Moisture Sensor (MR12)
  - Handheld Temperature/Humidity Sensor (MR11)
  - MR13_Temperature and Humidity Sensor
  - Temperature / RH Sensor and Extension Assembly (MR01-EXT)
- PINS
  - 2" pins, 1 pair (MR-PINS2)
  - 2" pins, 10 pairs (MR-PINS2-10)
  - 4" pins, 1 pair (MR-PINS4)
  - 6" pins, 1 pair (MR-PINS6)
  - Impact Pin Moisture Probe (MR05)
  - Replaceable External Moisture Pin Probe (MR02)

FLIR MR160

IGM™ Moisture Meter

The FLIR MR160 Imaging Moisture Meter is the first of its kind. Equipped with a built-in thermal camera, MR160 is the only moisture meter with the power to show you exactly where to measure.
Featuring Infrared Guided Measurement (IGM™) technology, the MR160 helps you quickly scan and target moisture issues, visually guiding you to the spot where you can confidently take measurements and analyze readings.
An integrated pinless sensor and an external pin probe provide the flexibility to take either intrusive or non-intrusive measurements. Built tough with an industry-leading warranty, the MR160 can serve as your go-to troubleshooting tool right out of the box – or as the perfect complement to any high resolution thermal camera you already
own – helping you find hidden moisture issues and capture reliable data more efficiently.

FLIR MR160

IGM™ Moisture Meter

IDENTIFY AND VERIFY WITH ONE TOOL

First-ever thermal imaging moisture meter

- 80 x 60 Lepton® thermal imager powers IGM technology
- Document thermal images and moisture readings on one screen
- Review images and generate reports with free FLIR Tools software

TROUBLESHOOT QUICKLY.

Easily investigate insulation and moisture issues

- Pinless technology for fast non-intrusive measurements
- External pin probe included for contact moisture measurements
- Easy targeting with laser pointer and display cross-hairs

PORTABLE, TOUGH AND DURABLE.

Drop tested rugged design

- Industry-leading warranty
- Small form factor to conveniently carry with you
- Internal rechargeable battery with USB

FLIR MR160

IGM™ Moisture Meter

FLIR MR160: Imaging Moisture Meter	
Imaging detector	FLIR Lepton® microbolometer focal plane array
Shutter	Integrated automatic shutter for auto flat field correction
Thermal image resolution (W × H)	4800 pixels (80 × 60)
Spectral response	8–14µm
Field of view (W x H)	51° × 38°
Sensitivity	<150mK
Image update speed frequency	9 Hz
Thermal image palettes	Ice
Thermal image minimum focus distance	10cm (4")
Moisture Measurement	
Pin moisture via external probe range (accuracy)	0–100% WME (± 5%)
Pin moisture groups	9 material groups
Pinless moisture range	0–100 relative measurement
Pinless Measurement Depth	0.75" (19mm) Max
Measurement resolution	0.1
Response time pinless	100ms
Response time pin mode	750ms
General information	
Display (W x H)	QVGA (320 x 240 pixel) 2.3" 64k color TFT
Saved image file format	BMP with measurement values overlaid
Stored image capacity	9999 images
Laser orientation	Single laser pointer to center of thermal image
Power requirements	Integrated rechargable battery
Battery power - continuous runtime	18 hours max
Battery power - typical usage	4 work weeks*
Battery	3.7 V, 3000 mAh Li-ion rechargeable via micro USB
Drop Test	9.8' (3m)
Certification standards	EN61326 (EMC), EN61010 (battery + charger), EN60825-1 class 2 (Laser)
Agency approvals	FCC class B, CE, UL
Warranty	2 Yr Product, 10 Yr Imager/Detector**

ACCESSORIES

- PROBES
  - Baseboard Probe (MR09)
  - Hammer and Wall Cavity Probe Combo (MR08)
  - Hammer Probe (MR07)
  - Wall Cavity Probe (MR06)
- CASES AND POUCHES
  - MR10-2_Protective Case for FLIR Moisture Meters
- SENSORS
  - Ball Probe Moisture Sensor (MR12)
- PINS
  - 2" pins, 1 pair (MR-PINS2)
  - 2" pins, 10 pairs (MR-PINS2-10)
  - 4" pins, 1 pair (MR-PINS4)
  - 6" pins, 1 pair (MR-PINS6)
  - Impact Pin Moisture Probe (MR05)
  - Replaceable External Moisture Pin Probe (MR02)

FLIR MR77

5-in-1 Moisture Meter with METERLiNK™

The FLIR MR77 has everything you need for moisture remediation or HVAC: a pinless moisture sensor and pin probe, a temperature and relative humidity sensor, and an IR thermometer. The meter includes Bluetooth® for remote viewing and sharing, as well as METERLiNK® technology to wirelessly embed readings into radiometric infrared images on compatible FLIR thermal cameras. Made with field-replaceable sensors, the MR77 is engineered to help you get more done in less time.

FLIR MR77

5-in-1 Moisture Meter with METERLiNK™

ALL THE SENSORS YOU NEED

- All-in-one tool featuring an integrated pinless moisture sensor, a pin-type probe, a temperature and relative humidity sensor, and an IR thermometer

CREATE REPORTS FAST

- Wirelessly connect to a compatible mobile device to share data and integrate readings onto images from FLIR thermal cameras.

BUILT TO LAST

- The double-molded, rubberized case is shock-resistant from drops as high as two meters to bolster reliability and durability.

FLIR MR77

5-in-1 Moisture Meter with METERLiNK™

TECHNICAL SUMMARY	RANGE	BASIC ACCURACY
Pinless Moisture	0 to 99.9	Relative
Pinless Moisture Depth Max	0.75in (19mm)	
Pin Moisture	0 to 99%WME	
Relative Humidity	0 to 99%RH	±2.5%RH
Sensor Temperature	-18 to 170°F, -28 to 77°C	±3.6°F, 2°C
IR Temperature	-4 to 392°F, -20 to 200°C	±3.5%
IR Distance to Spot Ratio	8 inches away : 1 inch spot size	
IR Emissivity	0.95 (fixed)	
Vapor Pressure	0 to 20.0kPa	±2%
GENERAL INFORMATION		
Warranty	Limited Lifetime*	
Bluetooth Range Max	32ft (10m)	

ACCESSORIES

- PROBES
  - Baseboard Probe (MR09)
  - Hammer and Wall Cavity Probe Combo (MR08)
  - Hammer Probe (MR07)
  - Wall Cavity Probe (MR06)
- CASES AND POUCHES
  - MR10-2_Protective Case for FLIR Moisture Meters
- SENSORS
  - Handheld Temperature/Humidity Sensor (MR11)
  - Replaceable Temperature, Relative Humidity Probe (MR01)
  - Temperature / RH Sensor and Extension Assembly (MR01-EXT)
- PINS
  - 2" pins, 1 pair (MR-PINS2)
  - 2" pins, 10 pairs (MR-PINS2-10)
  - 4" pins, 1 pair (MR-PINS4)
  - 6" pins, 1 pair (MR-PINS6)
  - Impact Pin Moisture Probe (MR05)
  - Replaceable External Moisture Pin Probe (MR02)
  - Replacement Pins, standard (MR05-PINS1)
  - Replacement Pins, wide (MR05-PINS2)

FLIR MR60

Moisture Meter Pro

The FLIR MR60 Moisture Meter Pro is an easy-to-use pin and pinless moisture meter with advanced functionality. An integrated pinless sensor and an external pin probe provide the flexibility to take destructive or non-destructive measurements. Select one of the eleven material groups for pin moisture, or set a reference point for pinless moisture scanning. Then conveniently save screenshots of your measurements as a CSV file with the date, time, and settings.

FLIR MR60

Moisture Meter Pro

DESTRUCTIVE OR NON-DESTRUCTIVE MEASUREMENTS

- Quickly scan for moisture using the integrated non-invasive pinless moisture sensor
- External pin probe (included) for resistive moisture content measurements
- Pin or Pinless moisture readings are displayed with large digits and color bargraph

CLEAR, ACCURATE READINGS

- Save up to 10,000 screenshots and readings that you can transfer & view via PC/USB
- Eleven (11) material group selections for pin-based readings
- Programmable high moisture alarm with audible and color visual alerts

SIMPLE TO USE AND CREATE REPORTS

- Bright, easy-to-read color display
- Intuitive graphical user interface with helpful function labels in local languages
- File management & report generation with free FLIR Tools PC software

FLIR MR60

Moisture Meter Pro

FLIR MR60 Moisture Meter Pro			
Pin moisture via external probe range	Wood groups 1-9: 1-5: oak, most maples, pine, hickory, teak, sycamore 6-9: building materials: plywood, drywall, OSB	7% - 30% 30 % - 100%	±1.5% (reference only)
	Construction material groups: 10: brick, cement screed, concrete 11: cement mortar, anhydrite screed, lime mortar, plaster	0- 20%	(reference only)
Pinless moisture range	0–100 relative measurement		
Pinless moisture depth	1.9cm (0.75”) maximum		
Sample rate	10Hz (approx., both modes)		
Measurement resolution	0.1		
Response time Pinless	100 ms		
Response time Pin Mode	750 ms		
General information			
Display type (W x H)	QVGA (320 x 240) pixel 2.3” 64K color TFT graphical display		
Warranty	2 years		
Stored data file format	Comma Separated Values (.csv) format with date/time stamp. Reading value, reading type included.		
Saved image file format	Bitmap (.bmp) with measurement values overlaid		
Stored image capacity	9999 images		
Internal memory	4GB		
Certification standards	EN61326 (EMC), EN61010 (Battery + Charger)		
Agency approvals	FCC Class B, CE, UL		
Power requirements	Integrated rechargeable battery		
Continuous Run Time	18 hours max		
Typical Usage	4 work weeks		
Auto power off	Programmable: OFF, 1, 5, or 20 minutes		
Power adapter	100–240 V input/ 5 V 1A output		
Battery	3.7 V, 3000mAh Li-ion rechargeable via micro USB		
IP Rating/Drop Test	IP54/3m (9.8 ft)		
Operating temperature	0~50 °C (32~122 °F)		
Storage temperature	-10~60°C (14~140°F)		
Operating humidity	≤ 90%, 0~30°C (32~86°F) ≤ 75%, 30~40°C (86~104°F) ≤ 45%, 40~50°C (104~122°F)		
Storage humidity	90% RH		
Includes	MR60, MR02 pin probe, Quick Start Guide, International Charger, Warranty Card, Brochure Card		

ACCESSORIES

- PROBES
  - Baseboard Probe (MR09)
  - Hammer and Wall Cavity Probe Combo (MR08)
  - Hammer Probe (MR07)
  - Wall Cavity Probe (MR06)
- CASES AND POUCHES
  - MR10-2_Protective Case for FLIR Moisture Meters
- SENSORS
  - Ball Probe Moisture Sensor (MR12)
- PINS
  - 2" pins, 1 pair (MR-PINS2)
  - 2" pins, 10 pairs (MR-PINS2-10)
  - 4" pins, 1 pair (MR-PINS4)
  - 6" pins, 1 pair (MR-PINS6)
  - Impact Pin Moisture Probe (MR05)
  - Replaceable External Moisture Pin Probe (MR02)

FLIR MR59

Ball Probe Moisture Meter with Bluetooth®

The MR59 is an affordable pinless meter for professionals in moisture remediation, pest control, home or building inspection, and floor installation. It is a high-quality, reliable, and easy-to-use moisture-detection tool. Wireless connectivity makes it easy to view readings on a mobile device from the FLIR Tools® Mobile app when the meter's display is out of view. Thanks to the ball-probe sensor, the user can cover a large area in a short time without making a mark; measure into corners, over uneven surfaces, and around baseboards; and detect problems below the surface. The MR59 is a reliable standalone meter—or a useful accessory to pair with a FLIR thermal imager.

FLIR MR59

Ball Probe Moisture Meter with Bluetooth®

LOCATE HIDDEN MOISTURE EFFICIENTLY

Survey large areas quickly and non-destructively

- Easily run the meter over and around objects on the measuring surface with the ball-probe sensor
- Create a heat map of the affected area and follow the migration path to a hidden source of moisture
- Identify potential moisture problems up to 100 mm (4 in) below the surface

INSPECT ANYWHERE WITH EASE

Designed to make your job easier and more efficient

- Wirelessly connect the meter to FLIR Tools Mobile to view readings on a mobile device
- Work in dim lighting with the backlit display and bright worklight
- Use with the MR04 extension pole to reduce the need for a ladder, or to optimize ergonomics for 'high' and 'low' measuring targets (accessory not included)

RELY ON THIS METER TO GET THE JOB DONE

Take the durable, drop-tested meter to every job

- Detect moisture in a wide range of common building materials
- Receive stable, repeatable readings. The meter's handgrip is designed to prevent hands from interfering with measurements
- Take advantage of product enhancements by upgrading firmware as needed via micro USB port (located in battery compartment)

FLIR MR59

Ball Probe Moisture Meter with Bluetooth®

Moisture Measurement	Range	Accuracy
Moisture	0 - 100%	Relative measurement
Measurement Detection Depth	Up to 100 mm (4 in) depending upon material under test	
General Information		
Connectivity	Bluetooth BLE	
	Communications Protocol: METERLiNK®	
Worklight	White LED	
Display	Backlit, multifunction LCD	
Measurement Principle	Capacitive (non-invasive)	
Warranty	Limited 3 years	
Battery Type	9 V battery	
Battery Life	Typical 40 hours without worklight	
Battery Status Indicator	4-bar battery icon (100% to empty)	
Auto Power Off (APO)	After 30 minutes	
Operating RH/Temperature	90%, 0°C to 30°C (32°F to 86°F)	
	75%, 30°C to 40°C (86°F to 104°F)	
	45%, 40°C to 50°C (104°F to 122°F)	
IP Rating	IP40	
Safety Compliance	CE, RCM, FCC/IC	
Drop Test	2 m (6.6 ft)	
Housing Material	Impact-resistant plastic	
Weight	245 g (8.6 oz)	
Dimensions	240.5 x 67 x 38 mm (9.5 x 2.6 x 1.5 in)	

ACCESSORIES

- PROBES
  - Extension Pole (MR04)

FLIR MR55

Pin Moisture Meter with Bluetooth®

The MR55 is an affordable pin-based meter for professionals in moisture remediation, pest control, home or building inspection, and floor installation. It is a high-quality, reliable, and easy-to-use moisture- measurement tool. Wireless connectivity allows the user to view data on a mobile device from the FLIR Tools® Mobile app. Thanks to a built-in library of 11 material groups, users can tune the meter to the appropriate test material and improve measurement accuracy. This library is easy to access on the FLIR.com website by scanning a QR code on the back of the meter with a mobile device. The MR55 is a reliable standalone meter—or a useful accessory to pair with a FLIR thermal imager.

FLIR MR55

Pin Moisture Meter with Bluetooth®

TAKE ACCURATE MEASUREMENTS

Rely on this standalone meter to provide high-quality data

- Pin moisture measurement automatically compensates for ambient temperature
- Improve accuracy by tuning the meter to the appropriate test material via built-in library of 11 material groups, including timbers, drywall, and concrete
- Measure ambient temperature and relative humidity

INSPECT ANYWHERE WITH EASE

Execute your job efficiently with powerful features that are easy to use

- Work in dim lighting with the backlit display and bright worklight
- Freeze measurements you see on the screen with the ‘data hold’ feature
- Quickly look up the correct material group on the FLIR website by using your mobile device to scan a QR code on the back of the meter
- Wirelessly connect the meter to FLIR Tools Mobile to view readings from a mobile device

COMPLETE YOUR WORK WITHOUT INTERRUPTION

Trust in this rugged and reliable meter to get the job done

- Detect moisture in a wide range of common building materials
- Receive stable, repeatable readings. The meter’s handgrip is designed to prevent hands from interfering with measurements
- Take advantage of product enhancements by upgrading firmware as needed via micro USB port (located in battery compartment)

FLIR MR55

Pin Moisture Meter with Bluetooth®

Moisture Measurement	Range	Accuracy
Moisture in Wood Group 1 - 9	7 - 29%	±2% MC*
	30 - 99%	Reference Only
Moisture in Building Materials (Group 10 and 11)	1 - 99% (Group 10)	Reference Only
	1 - 35% (Group 11)	
Environmental Measurement	Range	Accuracy
Ambient Temperature	0°C to 60°C (32°F to 140°F)	±1°C (2°F)
Ambient Relative Humidity	0 - 20% ±5%	±4%
	20 - 80% ±3.5%	±2%
General Information		
Connectivity	Bluetooth BLE Communications Protocol: METERLiNK®	
Worklight	White LED	
Display	Backlit, multifunction LCD	
Electrode Pins	Integrated, replaceable, 10 mm (0.4 in)	
Measurement Principle	Electrical resistance using pins	
Warranty	Limited 3 years	
Battery Type	(2) x 1.5 V AA	
Battery Life	Typical 70 hours without worklight	
Battery Status Indicator	4-bar battery icon (100% to empty)	
Auto Power Off (APO)	After 20 minutes	
Operating RH/ Temperature	85% Relative Humidity maximum / 0°C to 60°C (32°F to 140°F)	
IP Rating	IP40	
Safety Compliance	CE, RCM, FCC/IC	
Drop Test	2 m (6.6 ft)	
Housing Material	Impact-resistant plastic	
Weight	160 g (5.6 oz) battery excluded	
Dimensions	188 x 58 x 33 mm (7.4 x 2.3 x 1.3 in)	

FLIR MR40

Moisture Pen + Flashlight

The FLIR MR40 is a pocket-portable, rugged 2-pin, single- scale moisture meter with an integrated flashlight for wood and common building materials – ideal for builders, building inspectors, remodelers, moisture remediation technicians, pest control professionals, and residential roofing and flooring contractors. Providing reliable and accurate measurements offered at a highly affordable price point, MR40 is a quick and easy-to-use tool to find and quantify moisture content.

When used in combination with a thermal camera, MR40 can help confirm whether a cold spot in a thermal image is moisture, and measure the severity of the problem

FLIR MR40

Moisture Pen + Flashlight

EASY TO USE

Simple and effective tool for reliable measurements

- Clear LCD display
- Simple On/Off button with ‘Auto Power Off’
- Replaceable pins (includes 2nd set)
- Audible indication of measured range (5- 12%, 13-60%, 60%+)

CONVENIENT, PORTABLE, RUGGED DESIGN

Ready to work when and wherever you are

- Small enough to carry in your pocket and take measurements in tight spaces
- IP54 splash-proof rated, operating temperature: -10°C to 50°C
- 3-meter drop tested

RELIABLE AND ACCURATE MEASUREMENTS

Provides essential features and functions to quickly verify and quantify moisture

- Measurement ‘Hold’ function
- Calibration/Pin check integrated in cap

FLIR MR40

Moisture Pen + Flashlight

Measurements	
Measurement Range	5% to 60% MC (Moisture Content)
Measurement Accuracy	5 to 30% MC (Moisture Content): +/- 2% 30 to 60% MC (Moisture Content): Reference only Note: For materials other than Group 9/Building Materials: plywood, drywall, and oriented strand board (OSB), download the MR40 Material Conversion Table (publication MR40-AN01): http://tinyurl.com/jteb653
Audible Indication	5 to 12%: Low Beep rate. 13 to 60%: Higher beep rate. More than 60%: Highest Beep rate (Display OL)
Calibration/ Pin Check, Integrated in Cap	16%
General Information	
Flashlight	~40 lumens
Display	LCD
Electrode pins	Integrated, Replaceable (4 pins included)
Measurement Principle	Electrical Resistance
Warranty	Limited lifetime
Calibration cycle	N/A
Battery type	2 × AAA alkaline batteries (included)
Battery life	70 Hrs W/O Flashlight
Battery status indicator	4 Bar battery icon
Auto Power Off (APO)	3 minutes
Drop test	3 m (9.8 ft.)
IP Rating	IP54 Splash Proof
Operating temperature	-10 to 60°C (14 to 140°F)
Weight	80g (2.8 oz) with batteries
Dimensions (H × W × L)	193 x 26 x 31 mm (7.6” x 1.0” x 1.2”)
Material	PC-ABS w/TPE Overmold
What’s in the Box	**UPC**
MR40 Moisture Pen + Flashlight (spare set of pins in box)	793950370414
Accessories Optional	
MO25-PINS Spare electrode pins (10 pins per pack)	793950470268

Moisture Meters Accessories

MR01
Replaceable Temperature, Relative Humidity Probe

301-25-619

MR01-EXT
Temperature / RH Sensor and Extension Assembly

301-25-620

MR02
Replaceable External Moisture Pin Probe

301-25-621

MR04
Extension Pole

301-25-622

MR05
Impact Pin Moisture Probe

301-25-623

MR06
Wall Cavity Probe

301-25-626

MR07
Hammer Probe

301-25-627

MR08
Hammer and Wall Cavity Probe Combo

301-25-628

MR09
Baseboard Probe

301-25-629

MR10-2
Protective Case for FLIR Moisture Meters

301-25-620

MR11
Handheld Temperature/Humidity Sensor

301-25-631

MR12
Ball Probe Moisture Sensor

301-25-632

MR13
Temperature and Humidity Sensor

301-79-403

MR-PINS2 301-25-615
MR-PINS4 301-25-617
MR-PINS6 301-25-618
MR-PINS2-10 301-25-616

FLIR Thermal Studio Suite

Spot infrared Thermometers

TG54

24:1 Spot IR Thermometer

301-79-425

TG56

30:1 Spot IR Thermometer with Type K Thermocouple

301-63-460

FLIR TG54

24:1 Spot IR Thermometer

The FLIR TG54 provides non-contact surface temperature readings so you can quickly and easily take measurements in places that are out of reach. Providing a distance-to-spot ratio of 24:1, the TG54 can measure smaller targets from a safer distance. The thermometer gives you control to view your current reading and last two temperature readings simultaneously, and the color screen makes it easy to navigate and select settings.

FLIR TG54

24:1 Spot IR Thermometer

MEASURE SAFELY

- Provides non-contact temperature measurement and a 24:1 spot ratio to measure smaller targets from a safer distance.

SIMPLE TO USE

- The TG54's graphical menu structure and color display provide easy access to settings and clear navigation.

PORTABLE AND RUGGED DESIGN

- Built to withstand a 3-meter drop, the industrial and compact design makes it easy to carry wherever you need it.

FLIR TG54

24:1 Spot IR Thermometer

Spot IR Specifications	TG54	TG56
Distance to Spot Ratio (D:S)	24:1	30:1
Range	-30˚C to 650˚C (-22°F to 1202°F)	
Basic Accuracy	±1˚C/1.8°F or 1% of Reading	
Emissivity	Adjustable with 4 presets and custom option	
Resolution	0.1˚C / 0.1˚F	
Response	≤150 Milliseconds	
Spectral Response	5 to 14 microns	
Thermocouple (TC) Input Specifications		
Input Type	-	K
Input Range	-	-30˚C to 650˚C (-22°F to 1202°F)
Input Basic Accuracy	-	±2˚C/3.6°F or 1% of Reading
Measurement Resolution	-	0.1˚C / 0.1˚F
Included Type K Thermocouple Probe Range	-	-30˚C to 300˚C (-22°F to 572°F)
Features		
Max /Min	Yes	
Differential (MAX-MIN)	Yes	
AVG (6k pts running average)	Yes	
TC /IR Differential Mode	-	Yes
Alarm	High /Low	
Alarm Alert	Color (Red / Blue) indication	
General		
Display (w x h)	1.45" TFT LCD (128 x 128 pixels)	
Laser Orientation	Single laser pointer to center of measurement spot, Class 1	
Warranty*	5 Year	
IP Rating	Designed for IP56	-
Drop Test	Designed for 3m	
Continuous Run Time	8hrs Maximum	
Power Source	3 x AAA alkaline	
Auto Power Off	Yes with Pre-set adjustment level and Disable option	
Certifications	CE /FDA Laser	
Includes	Wrist Strap Lanyard, Quick Start Guide, User Manual (CD), 3 x AAA Batteries, (TG56 adds General Purpose Type K Thermocouple)	

FLIR TG56

30:1 Spot IR Thermometer with Type K Thermocouple

The FLIR TG56 provides non-contact surface temperature readings so you can quickly and easily take measurements in places that are out of reach. Providing a distance-to-spot ratio of 30:1, the TG56 can measure smaller targets from a safer distance. The thermometer gives you control to view your current reading and last two temperature readings simultaneously, and the color screen makes it easy to navigate and select settings.

FLIR TG56

30:1 Spot IR Thermometer with Type K Thermocouple

WORK SAFELY

- Provides non-contact temperature measurement and a 30:1 spot ratio to measure smaller targets from a safer distance.

SIMPLE TO USE

- The TG56's graphical menu structure and color display provide easy access to settings and clear navigation.

PORTABLE AND RUGGED DESIGN

- Built to withstand a 3-meter drop, the industrial and compact design makes it easy to carry wherever you need it.

FLIR TG56

30:1 Spot IR Thermometer with Type K Thermocouple

Spot IR Specifications	TG54	TG56
Distance to Spot Ratio (D:S)	24:1	30:1
Range	-30˚C to 650˚C (-22°F to 1202°F)	
Basic Accuracy	±1˚C/1.8°F or 1% of Reading	
Emissivity	Adjustable with 4 presets and custom option	
Resolution	0.1˚C / 0.1˚F	
Response	≤150 Milliseconds	
Spectral Response	5 to 14 microns	
Thermocouple (TC) Input Specifications		
Input Type	-	K
Input Range	-	-30˚C to 650˚C (-22°F to 1202°F)
Input Basic Accuracy	-	±2˚C/3.6°F or 1% of Reading
Measurement Resolution	-	0.1˚C / 0.1˚F
Included Type K Thermocouple Probe Range	-	-30˚C to 300˚C (-22°F to 572°F)
Features		
Max /Min	Yes	
Differential (MAX-MIN)	Yes	
AVG (6k pts running average)	Yes	
TC /IR Differential Mode	-	Yes
Alarm	High /Low	
Alarm Alert	Color (Red / Blue) indication	
General		
Display (w x h)	1.45" TFT LCD (128 x 128 pixels)	
Laser Orientation	Single laser pointer to center of measurement spot, Class 1	
Warranty*	5 Year	
IP Rating	Designed for IP56	-
Drop Test	Designed for 3m	
Continuous Run Time	8hrs Maximum	
Power Source	3 x AAA alkaline	
Auto Power Off	Yes with Pre-set adjustment level and Disable option	
Certifications	CE /FDA Laser	
Includes	Wrist Strap Lanyard, Quick Start Guide, User Manual (CD), 3 x AAA Batteries, (TG56 adds General Purpose Type K Thermocouple)	

ACCESSORIES

TEST LEADS AND PROBES

- Thermocouple Probe with Adapter (TA60)

Monitoring Solutions

FLIR SV87-KIT

Vibration Monitoring Solution

302-15-853

FLIR SV87-KIT

Vibration Monitoring Solution

Vibration trending and analysis can help detect serious problems with industrial machines long before the damage can be seen. That's why the FLIR SV87-KIT Vibration Monitoring Solution is essential for manufacturing processes that use rotating machinery, industrial pumps, fans, gearboxes, and motors. The included remote monitoring gateway stores sensor data and wirelessly transmits readings in real time to a mobile device or PC. This allows professionals to make knowledgeable decisions about machine operation and maintenance without having to wait for the next manual inspection – reducing unplanned downtime, lowering operational costs, and improving profitability.

FLIR SV87-KIT

Vibration Monitoring Solution

REDUCE MANUAL INSPECTIONS

Monitor vibration and temperature frequently to make better-informed decisions

- View real-time data and trending charts
- Predict mechanical failure before it occurs with automated vibration analysis
- Take corrective actions earlier through regular, routine monitoring and sampling

MAINTAIN SAFER OPERATIONS

Minimize exposure to dangerous environments and difficult-to-access locations

- Monitor conditions remotely from a mobile device or PC
- Reduce the need to change the sensor battery (4-year life), limiting direct contact with machinery
- Protect equipment from damage while ensuring a safer working environment by staying informed of abnormal conditions

ANALYZE DATA QUICKLY

Gain a faster understanding of the state of manufacturing equipment

- Receive an automatic alert or email the instant a defined vibration or temperature threshold is exceeded
- Review data samples that are automatically taken every 90 seconds and stored for further analysis
- Export sensor data to CSV files

FLIR SV87-KIT

Vibration Monitoring Solution

Measurement & Analysis	
Sensitivity range	±32 g
Frequency range	10 Hz to 1 kHz
Velocity data	mm/s or in/s derived from Fast Fourier Transform (FFT)
Capture rate	One data point/90 sec
Temperature range	Display measurement trend of contact temperature: -30°C to 80°C (-22°F to 176°F)
Data export format	CSV
Data visualization	Min, Max, live, historical data and trending charts on mobile devices and Windows®
Alerts	When a user defined vibration or temperature threshold is exceeded, a warning alert or email is issued.
Connections & Communications	
Bluetooth®	BLE 4.2
Range (during a session)	Up to 65 m, line-of-sight
Wi-Fi® type	IEEE 802.11 b/g/n
Wi-Fi frequency	2.4 GHz
Data storage	32 MB (approx. 5 days of data backup for 4 sensors in case of Wi-Fi outage)
Indicators	LEDs indicate power, sensor alarm and Wi-Fi status
General Information	
Warranty	3 years
Certifications	ETL, IC, FCC, CE, RCM
Supported Operating Systems	iOS® App: 9.0 or above; Android™ App: 7.0 or above Windows App: Windows 10, Intel® Core™ i3 processor or better
Environmental Data	
Operating temperature range	Gateway: -25°C to 65°C (-13°F to 149°F) Sensor: -30°C to 80°C (-22°F to 176°F)
Storage temperature range	Gateway: -25°C to 65°C (-13°F to 149°F) Sensor: -30°C to 80°C (-22°F to 176°F)
Relative humidity	10 to 95% non-condensing
Operating altitude	2000 m max.
Drop test	1 m
IP rating	Gateway: IP40; Sensor: IP67
Power	
AC input	Gateway: 100 V to 240 V AC, 50/60 Hz
Battery type	Sensor: 3.6 V Lithium battery
Battery life	Sensor: Typically 4 years (varies by usage)
Battery status indicator	Sensor: Low battery LED
Physical Data	
Packaging size (L × W × H)	18.25 × 12.90 × 8.50 cm (7.19 × 5.08 × 3.35 in)
Packaging weight	488 g (1.08 lb)
Size (L × W × H)	Gateway: 5.41 × 4.94 × 4.94 cm (2.11 × 1.93 × 1.93 in) Sensor: 6.5 × 2.5 × 2.7 cm (2.54 × 0.98 × 1.05 in)
Weight	Gateway: 66 g (0.15 lb); Sensor: 62 g (0.14 lb)
Box contents	GW65 Gateway for Vibration Monitoring Solution, 4 Gateway AC connectors for US/EU/UK/AUS power outlets, 4 SV87 Remote Vibration/Temperature sensors with adhesive tape, Quick Start Guide, access to configuration and visualization software

ACCESSORIES

Remote Monitoring Gateway

FLIR GW65

The FLIR GW65 Remote Monitoring Gateway is part of the FLIR SV87-KIT Vibration Monitoring Solution. It receives vibration and temperature data from SV87 sensors via Bluetooth® and sends data to the Windows and mobile apps using Wi-Fi®. The GW65 gateway also stores the data to its internal memory in case of Wi-Fi outage.

- Includes four AC connectors for US/EU/UK/Australia/NZ power outlets
- Works on 100-240 V AC, 50/60 Hz
- 3-year warranty

Vibration/Temperature Remote Sensor

FLIR SV87

The FLIR SV87 is a battery-powered remote vibration and temperature sensor designed exclusively for the SV87-KIT Vibration Monitoring Solution. It collects vibration and temperature readings every 90 seconds. This data is automatically sent to the FLIR GW65 Remote Monitoring Gateway via Bluetooth®.

- Sensitivity Range: ±32 g
- Frequency Range: 10 Hz to 1 kHz
- Operating Temperature Range: -30°C to 80°C (-22°F to 176°F)
- Typical battery life: 4 years
- 3-year warranty

Voltage, Continuity & Current Testers

FLIR VT8-Series

Voltage, Continuity, and Current Tester

301-25-652 301-25-653

FLIR VT8-Series

Voltage, Continuity, and Current Tester

The FLIR VT8-Series are high-quality voltage, continuity, and current testers. They feature an optimized, open-jaw design that can fit into tight spaces and reliably measure large-diameter cables. The VT8-600 carries a CAT III-600 V/CAT IV-300 V safety rating and a 100 A/600 V measuring range, while the VT8-1000 carries a CAT III-1000 V/CAT IV-600 V safety rating and a 200 A/1000 V measuring range. Extensive measurement features make the VT8-Series versatile tools – just one meter can get the job done.

FLIR VT8-Series

Voltage, Continuity, and Current Tester

RUGGED AND SAFE

- Made with the quality and reliability you have come to expect from FLIR test and measurement tools

RICH FEATURES

- Equipped with the capabilities you need including True RMS, AC/DC voltage and current, continuity, resistance, and capacitance

FLEXIBLE, EASY TO USE

- Take measurements in tight spaces with the optimized jaw design, and measure large-diameter cables with the wide jaw opening

FLIR VT8-Series

Voltage, Continuity, and Current Tester

Part Number	VT8-600	VT8-1000
Electrical Measurement		
True RMS Voltage and Current	Yes	
Auto-Ranging	Yes	
AC/DC Current Range	100 A	200 A
AC/DC Current Resolution	0.1 A	
AC (50 to 60 Hz) / DC Current Accuracy	±2.5%	
AC/DC Voltage Range	600 V	1000 V
AC/DC Voltage Resolution	0.1 V	
AC (45 to 66 Hz) / DC Voltage Accuracy	±1.5%, ±1.0%	
Resistance	60.00 MΩ ± (1.5%)	
Continuity Check Threshold	10 Ω to 100 Ω	
Capacitance	600 µF ±4.0%, 6000 µF ±10.0%	
Non-Contact Voltage Detector (NCV)	≥100 Vrms; ≤10 mm distance (LED/buzzer alerts)	
Additional Measurement Functions	DCA zero, relative mode (AC/DC voltage, AC current, and capacitance), data hold	
General		
Worklights	White LED	
Jaw Opening	15.5 mm (0.61 in)	
Display	6000-count backlit multi-function LCD	
Display Rate	Approximately 3 times per second	
Polarity	Automatic display of positive and negative polarity	
Over-Range Indication	"OL" or "-OL" displayed	
Auto Power Off	After 15 minutes	
Power Source	2 x AA alkaline batteries	
Low battery Indication	Battery symbol is displayed when batteries need changing	
Environmental Data		
Operating Temperature	-10 to 50°C (14 to 122°F)	
Relative Humidity	95% max; 5 to 30°C (41 to 86°F) / 75% max; 30 to 40°C (86 to 104°F) / 45% max; 40 to 50°C (104 to 122°F)	
Storage Temperature	-30 to 60°C (-22 to 140°F), batteries not installed	
Drop Test	2 m (6.6 ft)	
Physical Data		
Dimensions: (W × H × D)	210 mm × 53 mm × 35 mm (8.27 in × 2.1 in × 0.67 in)	
Weight	163.7 g (5.7 oz) including batteries	
General Information		
Warranty	Limited 3-year	
Certifications	C-UL-US, CE, RCM	
Safety Category Rating	CAT IV-300 V CAT III-600 V	CAT IV-600 V CAT III-1000 V
	EN 61010-1 EN 61010-2-032 EN 61010-2-033	

ACCESSORIES

TEST LEADS AND PROBES

- CAT IV Insulated Alligator Probes (TA70)
- TA83 Replacement Test Leads

CASES AND POUCHES

- Universal Soft Sided Case (TA15)
- TA17_Pouch for Clamp Meters

Model: VT8-600

Model: VT8-1000

Voltage Testers

FLIR VP42

Non-Contact Voltage Detector + Flashlight

301-42-014

FLIR VP52-2

Triple Alarm CAT IV Non-Contact Voltage Detector with Flashlight

301-79-257

FLIR VP42

Non-Contact Voltage Detector + Flashlight

The FLIR VP42 is a high-quality non-contact AC voltage detector (NCV) and flashlight that offers high-end features, making it the best value product in its category. The reliable, durable detector includes a bright flashlight, a vibration feedback alarm, and a CAT IV safety rating. Use it to identify live and neutral wires in sockets and junction boxes, and to trace live and neutral wires without contact.

FLIR VP42

Non-Contact Voltage Detector + Flashlight

RUGGED AND RELIABLE

Features a high-quality, durable design for safety and long term, trouble-free operation

- Detect voltage in electrical systems in large industrial facilities and residential low-voltage installations
- Never miss voltage presence with the tactile vibration and LED alarms – even in dark or noisy areas
- Durable to withstand a 3 m drop
- Work safely with the CAT IV safety rating

EASY TO USE

Offers an ergonomic design that's easy to grip and operate

- Avoid touching live wires with NCV technology
- Reduce risk of dropping the VP42 with double molded slip-resistant grip and an anti-roll case
- Place the sensor closer to electrical sources with the low-profile probe tip

TROUBLESHOOT QUICKLY

Provides features that can improve work efficiency

- Execute tasks efficiently with the bright flashlight and tip light to see target area
- Eliminate interruption from a dead battery with the low-battery indication feature
- Maximize battery life with the 'auto power off' feature

FLIR VP42

Non-Contact Voltage Detector + Flashlight

Measurement	
AC Voltage Range (default, solid green light)	190 to 1000 V AC
AC Excitation Voltage / Distance Frequency Range	190 V AC minimum / 1 cm (0.4 in)
	45 to 65 Hz
High-Sensitivity Mode (solid amber light)	24 to 1000 V AC
Meter Data	
Flashlight	Yes
Tip Light Category Rating Warranty	Yes
	CAT IV-1000 V
	Limited 3-year
General Information	
Certifications	UL, cUL, CE, RCM
Power System	
Power Requirements	2 × AAA alkaline batteries
Battery Life	~7 hours continuous (flashlight off)
Low Battery Voltage Auto Power Off	Status LED flashes amber color
	After 3 minutes of inactivity
Environmental Data	
Drop Test	3 m (9.8 ft)
Operating Ambient Temperatures Storage	0 to 60°C (-32 to 140°F)
Temperature	-40 to 90°C (-40 to 194°F)
Physical Data	
Weight	0.20 kg (0.44 lb), including batteries
Dimensions (H × W × L)	29 × 26 × 156 mm (1.1 × 1.0 × 6.1 in)

FLIR VP52-2

Triple Alarm CAT IV Non-Contact Voltage Detector with Flashlight

The FLIR VP52-2 is a durable, CAT IV-rated non-contact voltage detector featuring light, vibration, and beeper feedback alarms and a powerful LED flashlight. Use the VP52-2 to reliably check if an AC circuit is live before beginning work; detect voltage on exposed conducting parts or through insulation; identify live wires within electrical panels, switches, and outlets; or trace live wires and map circuits. With an ergonomic and drop-tested design, the FLIR VP52-2 is the right choice for professionals performing field troubleshooting and verification of electrical installations within residential, commercial, and industrial buildings.

FLIR VP52-2

Triple Alarm CAT IV Non-Contact Voltage Detector with Flashlight

RUGGED AND RELIABLE

Designed for long-term, trouble-free operation, the FLIR VP52-2 will last for years to come

- Detect voltage in electrical systems in both large industrial facilities and residential low-voltage installations
- Reliably test for voltage in the latest safety outlets
- Never miss voltage presence with tactile vibration, sound, and LED alarms—
- even in dark or noisy areas
- Durable to withstand a 3 m (9.8 ft) drop

EASY TO USE

Offers an ergonomic design that's easy to grip and operate

- Avoid touching live wires with non-contact voltage (NCV) technology
- Reduce risk of dropping the VP52-2 with double molded slip-resistant grip and anti-roll case
- Place the sensor closer to electrical sources with the low-profile probe tip

TROUBLESHOOT QUICKLY

Provides features that can improve work efficiency

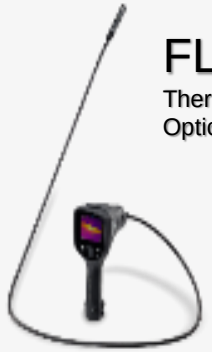
- See target area clearly in poor lighting conditions with the bright flashlight and tip light
- Eliminate interruption from a dead battery with the low-battery indication feature
- Maximize battery life with the auto power off feature

FLIR VP52-2

Triple Alarm CAT IV Non-Contact Voltage Detector with Flashlight

Measurement	
AC Voltage Range (default, solid green light)	190 to 1000 V AC
High-Sensitivity Mode (solid amber light)	24 to 1000 V AC
Frequency Range	45 to 65 Hz
Meter Data	
Sound Alert	Yes
Flashing LED Alert	Yes
Vibration Alert	Yes
Flashlight	Yes
Tip Light	Yes
Category Rating	CAT IV 1000 V
General Information	
Warranty	Limited 3-year
Certifications	CE, RCM
Power System	
Power Requirements	2 × AAA (LR03) alkaline batteries
Battery Life	~5 hours continuous (flashlight off)
Low Battery Voltage	Status LED flashes amber color
Auto Power Off	After 3 minutes of inactivity
Environmental Data	
Drop Test	3 m (9.8 ft)
Operating Ambient Temperatures	-10 to 50°C (14 to 122°F)
Storage Temperature	-20 to 60°C (-4 to 140°F)
Physical Data	
Weight	59 g (2.1 oz) including batteries
Dimensions (L × W × H)	158.5 × 26 × 29 mm (6.24 × 1.02 × 1.14 in)

Videoscope



FLIR VS290™

Thermal Videoscope Kits with Specialty Probe Options

302-15-857

Accessories

FLIR VS70

Shock-Resistant Videoscope

110-81-663

FLIR VS290™

Thermal Videoscope Kits with Specialty Probe Options

The FLIR VS290 is an industrial thermal and visual videoscope system designed to help professionals quickly and safely find hidden faults and dangers in difficult-to-access locations. Featuring a 160 × 120 true thermal imager and FLIR MSX® (VSC-IR32 and VSC-IR33 probes), VS290 videoscopes give users the power to see and measure invisible hot spots before catastrophic equipment failures can occur. The small, sleek tips allow for easy inspection through tight or confined openings, improving productivity and reducing diagnostic time. The 2-meter side-viewing probe options are CAT IV 600V safety rated—perfect for underground electrical vault inspections. The 1-meter forward-viewing probe is a practical fit for general purpose equipment and building thermal scans. All are versatile tools for the most demanding environments in utility, manufacturing, and building maintenance applications.

Model: FLIR VS290-00

Model: FLIR VS290-21

Model: FLIR VS290-32 Acc: FLIR VSC-IR32

Model: FLIR VS290-33

FLIR VS290™

Thermal Videoscope Kits with Specialty Probe Options

INSPECT DIFFICULT-TO-ACCESS AREAS SAFELY

Quickly find hidden faults without entering unsafe or hard-to-reach spaces

- Troubleshoot problems from a safe distance with the 160 × 120 true thermal imager
- Easily maneuver the narrow 2 m or 1 m field-replaceable camera probe to inspect underground electrical distribution faults, inside large gearboxes, motors, attics, crawl spaces, and other cramped locations
- Instantly recognize the location of a temperature issue with FLIR MSX that embosses scene details from the built-in visual camera onto the full thermal image*
- Navigate dark environments using the bright LED worklight*

IDENTIFY, DOCUMENT, AND SHARE

Improve workflow and communicate potential issues before they become major problems

- View findings clearly on the large 3.5-inch color display and use color alarms (isotherms) to quickly identify problems
- Save images and videos using the included SD memory card then upload to a PC via USB-C Cable
- Quickly create reports using FLIR Thermal Studio Suite software and share findings with team members to prioritize repairs

VERSATILE, RUGGED, AND RELIABLE

Use the VS290 system in the most demanding environments

- IP67 camera tips and IP54 base unit and probe provide a high level of protection against dust and water
- Easily replace or interchange the camera probe while in the field
- Conduct electrical inspections safely with CAT IV 600 V-rated VSC-IR32 and VSC-IR33 probes

FLIR VS290™

Thermal Videoscope Kits with Specialty Probe Options

Imaging and optical data	
IR resolution	160 × 120 pixels
Digital image enhancement	Yes, MSX® on VSC-IR32 and VSC-IR33 probes only
Thermal sensitivity/NETD	<100 mK
IR Field of view (FOV)	57° × 44°
Minimum focus distance	0.15 m
Minimum focus distance with MSX	0.65 m(VSC-IR32 and VSC-IR33 only)
Image frequency	8.7 Hz
Focus	Fixed
Focal plane array/spectral range	Uncooled microbolometer/7.5–14 µm
Detector pitch	12 µm
Image presentation	
Display resolution	320 × 240 pixels
Screen size	3.5 in
Color palettes	Iron, Rainbow, Gray, Below alarm, Above alarm
Image modes	IR only, visual only, MSX (visual only and MSX available on VSC-IR32 and VSC-IR33 probes)
Gallery	Yes
Measurement and analysis	
Object temperature range	-10 to 400°C (14 to 752°F)
Measurement accuracy	At ambient temp. 15 to 35°C (59 to 95°F) and object temp. above 0°C (32°F) 0 to 100°C (32 to 212°F): ±3°C (±5.5°F) 100 to 400°C (212 to 752°F): ±3%
Spotmeter	1 in live mode
Emissivity correction	3 preset and 1 custom emissivity setting
Image storage and visual camera	
Storage capacity	Removable SD card (16 GB) - about 80,000 images
Image file format	Radiometric JPEG
Visual camera resolution	2 MP on VSC-IR32 and VSC-IR33 probes only
Visual camera field of view (FOV)	83° on VSC-IR32 and VSC-IR33 probes only
Worklight	Bright LED on VSC-IR32 and VSC-IR33 only
Data communication interface	
USB	USB Type-C: data transfer/power

Additional data	
Battery type	Rechargeable 3.7 V Li-ion
Battery operating time	>5 hours (full LCD brightness and worklight on)
Probe length (including tip)	VSC-IR21 Probe only: 111.5 cm (43.9 in) VSC-IR32 Probe only: 212.2 cm (83.5 in) VSC-IR33 Probe only: 211.9 cm (83.5 in)
Probe tip shape – forward view Probe tip shape – side view Probe tip shape – side view	VSC-IR21 – round 19 mm diameter VSC-IR32 – rectangular 11 mm (thinnest dimension) VSC-IR33 – round 19 mm diameter
Weight of kits (including two batteries)	Complete VS290-21 kit with case: 4.8 kg (10.58 lb) Complete VS290-32 and VS290-33 kit with case: 13.0 kg (26.46 lb)
Weight of individual components	Videoscope Display Only: 640 g (1.41 lb) VSC-IR21 Probe Only: 490 g (1.08 lb) VSC-IR32 Probe Only: 470 g (1.04 lb) VSC-IR33 Probe Only: 470 g(1.04 lb)
Size of kits and videoscope (L × W × H)	Complete VS290-21 kit with case: 53 × 33 × 16.5 cm (20.87 × 12.99 × 6.5 in) Complete VS290-32 and VS290-33 kit with case: 118 × 45 × 16 cm (46.46 × 17.72 × 6.3 in) Videoscope display only: 26.4 × 11 × 11 cm (10.4 × 4.3 × 4.3 in)
Box contents	
Kits include videoscope display, thermal camera probe, two rechargeable batteries, battery charger, SD card, USB cable, wrist strap, hard case, printed documents	
Complete Kits	
VS290-21	Thermal Videoscope Kit with 19 mm Diameter Round Tip Forward View Camera Probe
VS290-32	Thermal MSX® Videoscope Kit with CAT IV 11 mm Rectangular Tip Side View Camera Probe
VS290-33	Thermal MSX® Videoscope Kit with CAT IV 19 mm Diameter Round Tip Side View Camera Probe
Individual Components -- available as extra probes and/or spare videoscope displays	
VSC-IR21	Thermal Camera Probe with 19 mm Diameter Round Tip (Forward View)
VSC-IR32	Thermal MSX® Camera Probe with 11 mm Rectangular Tip (Side View)
VSC-IR33	Thermal MSX® Camera Probe with 19 mm Diameter Round Tip (Side View)
VS290-00	Videoscope Display for VS290 Series

ACCESSORIES

PROBES

- Thermal 160 × 120 Camera Probe with Rounded Tip (VSC-IR21)
- Thermal 160 × 120 MSX® Camera Probe with Rounded Tip (VSC-IR32)
- Thermal 160 × 120 MSX® Camera Probe with Rounded Tip (VSC-IR33)

BATTERIES AND POWER

- Battery (T199330ACC)
- Battery Charger (T199425ACC)
- Power Supply for Battery Charger (T911633ACC)

CABLES AND ADAPTERS

- USB 2.0 A to USB Type-C cable (T911631ACC)

OTHER

- Videoscope Display and Battery for VS290 Series (VS290-00)

FLIR VS70

Shock-Resistant Videoscope

The FLIR VS70 is a rugged, waterproof, and shock-resistant videoscope with a large 5.7-inch color LCD display. It features intuitive handset controls that enable users to maneuver the narrow camera probe into tight spaces to deliver vivid and sharp video and images. Advanced inspection solutions, expansion cameras, and add-on accessories enable users to expand their FLIR VS70 to address many different inspection needs.

VS70	FLIR VS70 VideoScope (main unit, without cameras)
VS70-1	General Purpose Long Focus Combo, Wired (VS70 + VSC80-1R)
VS70-1W	Wireless General-Purpose Combo (VS70 + VST + VSC80-1R)
VS70-2	Small Opening Short Focus Combo, Wired (VS70 + VSC58-1RM)
VS70-3	Articulation Combo, Long Focus (VS70 + VSA2-1)
VS70-3W	Wireless Articulation Combo (VS70 + VSA2-1-W)
VS70-4	4-Way Articulating VideoScope Kit, long focus (VS70 + VSA4-1-W)
VS70-4M	4-Way Articulating VideoScope Kit, short focus (VS70 + VSA4-1M-W)
VS70-KIT	Articulation Pro Kit (VS70 + VSA2-1 + VSC80-1R)
VS70-KIT-W	Wireless Articulation Kit (VS70 + VSA2-1-W + VSC80-1R)

FLIR VS70

Shock-Resistant Videoscope

DESIGNED FOR ALL-DAY INSPECTIONS

Extended battery life accommodates a full day of inspections without recharging.

MULTIPLE ARTICULATION OPTIONS

Includes two-way, two-way wireless, and four-way wireless controls. Select 180° or 90° camera angles with a dual-channel camera.

CREATE REPORTS QUICKLY AND EASILY

Voice-annotate video recordings, grab still images from captured video, then transfer data to a PC via SD card or USB.

FLIR VS70

Shock-Resistant Videoscope

Answer the below questions to begin the selection process. Match up the colored circles in the Selection Guide to the VS70 options that best meet your needs.

Smallest opening sizes?

- Smallest diameter cameras for openings less than 5mm
- Smaller diameter cameras for openings less than 10mm (3/8”) in size
- Larger diameter cameras for openings more than 10mm (3/8”) in size

Distance to inspection targets?

- Short Focus Cameras to check for fine details from 20 to 60mm away
- Long Focus Cameras to see distances from 65mm to ∞

Typical target distances?

1-Meter Cables for shorter distances

- 2-Meter Cables for distances greater than 1 meter
- 20- or 30-Meter Cables for longer distances

Need More Viewing Options?

2-Way Articulation Camera

- Dual Camera (180/90°) Camera
- Rigid Probe with Rotating Mirror

type	part number	solution(mm)	Diameter	length (m)	resolution(px)	FOV(°)	FoCal length mm	wireless
Articulating Cameras								
2-Way Articulation Wireless Handset with integrated cable and camera	VSA2-2M-W		6	2	307,200	56	20 to 60	Yes
	VSA2-2-W		6	2	307,200	56	65 to ∞	Yes
	VSA2-1M-W		6	1	307,200	56	20 to 60	Yes
	VSA2-1-W		6	1	307,200	56	65 to ∞	Yes
2-Way Articulation Wired Handset with integrated cable and camera	VSA2-2		6	2	307,200	56	65 to ∞	With VST
	VSA2-2M		6	2	307,200	56	20 to 60	With VST
	VSA2-1		6	1	307,200	56	65 to ∞	With VST
	VSA2-1M		6	1	307,200	56	20 to 60	With VST
General inspections								
Small Diameter Cameras with cables	VSC41-2RM		4.1	2	76,800	53	20 to 60	With VST
	VSC39-1FM		3.9	1	76,800	53	20 to 60	With VST
General Purpose Cameras with cables	VSC58-2R		5.8	2	307,200	56	65 to ∞	With VST
	VSC58-2RM		5.8	2	307,200	56	20 to 60	With VST
	VSC58-1R		5.8	1	307,200	56	65 to ∞	With VST
	VSC58-1RM		5.8	1	307,200	56	20 to 60	With VST
	VSC80-2R		8	2	307,200	56	65 to ∞	With VST
	VSC80-1R		8	1	307,200	56	65 to ∞	With VST
Specialty inspections								
Dual Camera with cable	VSC2-58-1FM		5.8	1	307,200	56	20 to 60	With VST
Rigid Probe Cameras with handle	VSC65-17S		6.5	.43	307,200	56	20 to 60	With VST
	VSC65-12S		6.5	.30	307,200	56	20 to 60	With VST
Plumbing inspections								
Small Opening Camera on Long-Reach Cable	VSC58-30M		5.8	30	76,800	56	20 to 60	With VST
	VSC58-20M		5.8	20	76,800	56	20 to 60	With VST
Detachable Cameras for use with Plumbing Spool Cables	VSC25		25	—	307,200	72	60 to 600	—
	VSC28		28	—	307,200	110	60 to 600	—
Plumbing Spool Cables for use with Detachable Cameras	VSS-30		—	30	—	—	–	With VST
	VSS-20		—	20	—	—	–	With VST

FLIR VS70

ACCESSORIES

3.9mm (0.15 in)
VSC39-1FM

4.1mm (0 .16 in)
VSC41-2RM
110-83-961

5.8mm (0.23 in)
VSC58-20M* 110-83-979

5.8mm (0.23 in)
Dual Camera 110-83-978
VSC2-58-1FM

6.5mm (0.26 in)
90° Mirror Tube 110-83-966
VSC65-12S**

8mm (0.32 in)
VSC80-1R*** 110-83-969

25mm (1 in),
72° Field of View
VSC25

28mm (1.1 in),
110° Field of View
VSC28

30 cm (12 in) Stainless
Steel Rigid Probe
VSC6512S
110-83-966

43 cm (17 in) Stainless
Steel Rigid Probe
VSC6517S

20m (66ft)
plumbing spool
VSS-20

20m (66ft)
plumbing spool
VSS-20

Wireless Handset Transmitter
VST

Two-Way Articulating
Camera with Long Focus,
1m, 6mm Diameter
VSA2-1
110-83-945

Two-Way Articulating
Camera with Macro short
Focus, 1m, 6mm Diameter
VSA2-1M

Two-Way Articulating
Camera with Long Focus,
1m, 6mm Diameter
VSA2-2
110-83-951

Two-Way Articulating
Camera with Macro short
Focus, 1m, 6mm Diameter
VSA2-2M

Wireless Four-way
Articulating Camera, 25–
60mm
VSA4-1-W

Wireless Four-way
Articulating Camera, 60 mm
to Infinity
VSA4-1M-W

Wireless Two-way
Articulating Camera With
Long Focus, 1m, 6mm
Diameter
VSA2-1-W
110-83-948

Wireless Two-way
Articulating Camera With
Macro Short Focus, 1m,
6mm Diameter
VSA2-1M-W

Wireless Two-way
Articulating Camera With
Long Focus, 2m, 6mm
Diameter
VSA2-2-W

Wireless Two-way
Articulating Camera With
Macro Short Focus, 2m,
6mm Diameter
VSA2-2M-W

Acoustic Imaging Cameras

FLIR Si124™

Industrial Acoustic Imaging Camera

The FLIR Si124 is an intelligent, easy-to-use imaging system designed to visually show pressurized leaks in compressed air systems and display partial discharge problems in high- voltage electrical systems. This lightweight, one-handed solution can help utility, manufacturing, and engineering professionals identify efficiency loss and potential failures up to 10 times faster than traditional methods. Built with 124 microphones and a frequency range that covers audible and ultrasound (2 kHz to 35 kHz), the Si124 sees through background noise commonly found in industrial environments to produce precise acoustic imagery. The acoustic image is overlaid in real time on top of a digital camera picture, which allows the user to accurately pinpoint the source of the sound and classify problems. Equipped with the FLIR Acoustic Camera Viewer cloud service, this smart tool automatically saves images to the cloud after they are captured. Users can then apply the FLIR Advanced Severity Assessment analysis to classify the severity of the issue and provide guidance on recommended actions to resolve the problem. Adopting the FLIR Si124 as part of a regular maintenance routine, professionals can identify issues fast—helping utilities keep the power flowing and manufacturing operations going.

Available in 3 models:

- Model: Si124 Acoustic Camera
- Model: Si124-LD Acoustic Camera
- Model: Si124-PD Acoustic Camera

FLIR Si124™

Industrial Acoustic Imaging Camera

FIND LEAKS 10X FASTER

Reduce electricity waste and optimize equipment performance

- Pinpoint costly compressed air leaks in noisy industrial environments
- Instantly view the leak rate (l/min or CFM) and estimate yearly energy loss
- Extend compressor life by eliminating wasted output

SEE THE SOUND OF PD AND CORONA

Minimize equipment failures and downtime that result from PD/corona issues

- Classify partial discharge type—including surface discharge, floating discharge, and discharge into air—to improve reliability of electrical systems
- Identify corona discharge day or night, allowing quick replacement of defective components before a catastrophic failure
- Operate the lightweight camera with one hand

VISUALIZE, CLASSIFY, QUANTIFY

Calculate critical decision-making data instantly with cloud analytics software

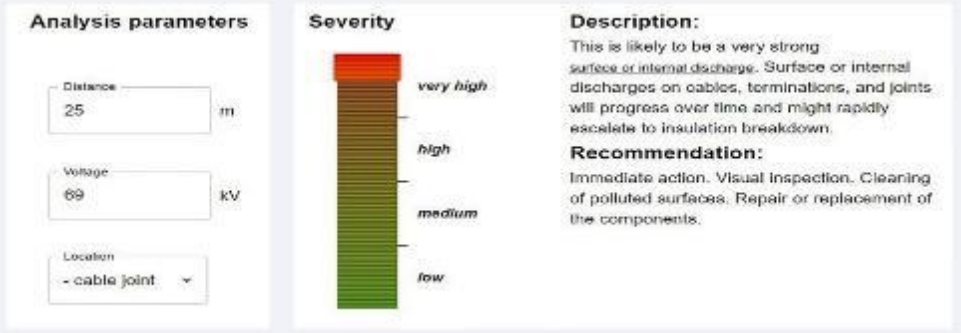
- Upload, store, and back up data; create reports; and conduct deep analysis using FLIR Acoustic Camera Viewer cloud analytics
- Quickly calculate estimated yearly energy expense caused by a compressed air/vacuum leak
- Assess whether service or replacement are needed by classifying PD/corona types instantly
- Determine the level of threat from partial discharge with Advanced Severity Assessment software analytics

FLIR Si124™

Industrial Acoustic Imaging Camera

Acoustic specifications	Si124
Acoustic measurement	124 low-noise MEMS microphones, real-time sound visualization
Sensitivity, accuracy	<-15 dB
Dynamic range	>120 dB (frequency-dependent)
Bandwidth	2 kHz to 35 kHz, adjustable range
Distance	From 0.3 m (1.0 ft) up to 130 m (430 ft)
Compressor / Vacuum Leak Rates	In typical industrial environment: • >0.032 l/min @ 3 bar from 3 m (9.8 ft) • >0.05 l/min @ 3 bar from 10 m (32.8 ft) Absolute minimum detection in quiet environment: 0.016 l/min @ 1.2 bar from 0.3 m (1.0 ft)
Electrical discharge classification	• Negative corona • Positive and negative corona • Floating discharge • Surface or internal discharge PRPD pattern provided in FLIR Acoustic Camera Viewer cloud service.
User interface	
Display	Size: 5 in, 800 × 480 Color: 24-bit RGB Brightness: 1000 cd/m² (adjustable)
Input device	Resistive touchscreen
Power On indicator	Red LED
Video image resolution	800 × 480
Video frame rate	25 fps
Acoustic image frame rate	30 fps
Zoom	2x digital zoom
Communication and data storage	
Wireless data transfer	Wi-Fi 2.4 GHz and 5 GHz IEEE 802.11.b/g/n/ac wireless LAN
Storage, internal	32 GB/2000 snapshots (typical) on non-removable SD card
Storage, external	8 GB/500 snapshots (typical) USB mass storage, provided with device
Power supply	
Nominal input voltage	12 V Max input: 15 V, 2.5 A
External battery	LiFePO 12 V 7 Ah, 84 Wh Usage: up to 7 h (depends on ambient conditions) Charge time: 4 to 6 h Max output: 13.8 V, 4.0 A
Battery charger	Input: 100-240 V AC, 50/60 Hz 1.3 A Max output: 14.6 V, 4.0 A

Environmental	
Operating and storage temperature range	Recommended: -10°C to 50°C (14°F to 122°F)
Operating and storage humidity	Recommended: 0 to 90%
Physical data	
Camera size	273 × 170 × 125 mm (10.7 × 6.7 × 4.9 in)
Camera weight	Camera: 980 g (2.2 lbs)
Battery size	90 × 145 × 65 mm (3.5 × 5.7 × 2.6 in)
Battery weight	985 g (2.2 lbs)
Total weight, incl. all accessories	2.9 kg (6.4 lbs)
Battery cord length	0.75 m (2.46 ft), extended 1.5 m (4.92 ft)
Included in the Box	
Contents	Camera, camera pouch, hand strap, USB memory stick, and battery with cable, charger, and pouch



Recognize PD issues and determine severity with FLIR Severity Assessment, included in the analysis software

FLIR Si124™

ACCESSORIES

CASES AND POUCHES

- Soft Carrying Case (T911980)

BATTERIES AND POWER

- Battery Charger (T911984)

- Cable from Battery (T911981)

- Rechargeable Battery (T911982)

OTHER

- T911987_Acoustic Camera Tester with Table Tripod for Si124

FLIR T10xx

FLIR T1020

HD Thermal Camera with Viewfinder

FLIR T1010

HD Thermal Camera

Accessories

FLIR T1020

HD Thermal Camera with Viewfinder

Get ready for outstanding thermal imaging performance, built on 50 years of experience. With its remarkable range, up to 3.1 M resolution (UltraMax®), and an agile, new user interface, FLIR's flagship T1020 is designed to streamline your workday, and make you the hero. For the sharpest images, the truest temperatures, the most flexibility—the T1020 is the ultimate result of five decades of infrared expertise. The FLIR T1020 comes with on-board Inspection Route mode so you can download and run survey plans to your camera from FLIR Thermal Studio Pro with Route Creator plugin (3-month subscription included).

FLIR T1020

HD Thermal Camera with Viewfinder

OUTSTANDING IMAGE CLARITY

See more detail and find hidden problems before they lead to costly system failures or shutdowns

- Get the best resolution of any FLIR hand-held camera with the T1K's 1024 x 768 detector
- Detect subtle temperature differences, down to <0.01°C, that may signal an electrical or mechanical problem
- Record smooth, low-noise images that are easy to interpret with FLIR Vision Processing™, featuring MSX, UltraMax®, and proprietary adaptive filtering algorithms

EXCEPTIONAL MEASUREMENT PERFORMANCE

Get accurate temperature readings from any angle or distance, so you can troubleshoot systems faster

- Pinpoint small temperature anomolies from farther away with FLIR's high-fidelity OSX Precision HDIR lenses
- Enhance measurement accuracy with UltraMax, which improves the distance to spot-size ratio
- Monitor electrical and mechanical systems with a variety of temperature conditions thanks to measurement ranges up to 2000°C (3632°F)

DESIGNED FOR THE EXPERT USER

Compact format, a responsive new user-interface, and advanced reporting software make your workday more productive

- Navigate screens and set up work folders easily with intuitive, rapid-response GUI
- Adjust images and improve measurements in the camera with features such as 1-Touch Level/Span
- Capture full-resolution, full-frame radiometric video for comprehensive analysis
- Analyze thermal images and report findings easily with included FLIR Tools+ software

FLIR T1020

HD Thermal Camera with Viewfinder

Specifications	T1010	T1020
IR Resolution	1024 × 768 (786,432 pixels)	1024 × 768 (786,432 pixels)
UltraMax®	3.14 Mpixels	3.14 Mpixels
Thermal Sensitivity/NETD	<25 mK @ 30°C (86°F)	<20 mK @ 30°C (86°F)
Field of View (FOV)	45° × 34° (21 mm lens), 28° × 21° (36 mm lens), 12° × 9° (83 mm lens)	45° × 34° (21 mm lens), 28° × 21° (36 mm lens), 12° × 9° (83 mm lens)
F-Number	f/1.2	f/1.2
Lens Identification	Automatic	Automatic
Image Frequency	30 Hz	30 Hz
Focus	One-shot, manual	One-shot, manual
Digital Zoom	1-8x continuous	1-8x continuous
Detector Data		
Detector Type and Pitch	Uncooled microbolometer, 17 µm	Uncooled microbolometer, 17 µm
Spectral Range	7.5 – 14.0 µm	7.5 – 14.0 µm
Image Presentation and Modes		
Display	4.3", 800 × 480 pixel capacitive touch screen with auto-orientation	4.3", 800 × 480 pixel capacitive touch screen with auto-orientation
Viewfinder	—	Built-in, 800 × 480 pixels
Digital Camera	5 MP with built-in LED	5 MP with built-in LED
Color Palettes	Iron, Rainbow, Rainbow HC, White hot, Black hot, Arctic, Lava,	Iron, Rainbow, Rainbow HC, White hot, Black hot, Arctic, Lava,
Image Modes	Infrared, visual, MSX	Infrared, visual, MSX, Picture-in-Picture
Picture-in-Picture	—	Resizable and movable
Time-lapse (Infrared)	—	15 sec to 24 hrs
Measurement and Analysis		
Object Temperature Range	-40°C to 150°C (-40°F to 302°F), 0°C to 650°C (32°F to 1200°F)	-40°C to 150°C (-40°F to 302°F), 0°C to 650°C (32°F to 1200°F), 300°C to 2000°C (572°F to 3632°F)
Accuracy	±2°C (±3.6°F) or ±2% of reading at 25°C (77°F)	±1°C (±1.8°F) or ±1% at 25°C (77°F) for temperatures from 5°C to 150°C (41°F to 302°F)
Alarms	—	Above, below, interval, moisture, insulation
Measurement function alarm	—	Audible/visible above/below alarms on any selected measurement function
Compass, GPS	—	Yes; automatic GPS image tagging
METERLiNK®	—	Yes; several readings
Measurement Presets	No measurement, center spot, hot spot, cold spot, User Preset 1, User Preset 2	No measurement, center spot, hot spot, cold spot, User Preset 1, User Preset 2
Spotmeter	1	10
Area	1 box with max/min/avg	5 + 5 areas (boxes and circles) with max/min/avg
Laser Pointer	Dedicated button	Dedicated button
Data Storage and Streaming		
Storage Media	Removable SD card	Removable SD card
Image File Format	Standard JPEG with measurement data included	Standard JPEG with measurement data included
Radiometric IR Video Recording	—	Real-time radiometric recording (.csq)
Non-Radiometric IR or Visual Video	H.264 to memory card	H.264 to memory card
Radiometric IR Video Streaming	Yes, over USB	Yes, over USB
Non-Radiometric IR Video Streaming	H.264 over USB	H.264 over Wi-Fi or USB
Video Out	—	HDMI 640 × 480, HDMI 1280 × 720, DVI 640 × 480, DVI 800 × 600
Additional Data		
Battery Type	Rechargeable Li-ion battery	Rechargeable Li-ion battery
Battery Operating Time	Approx. 2.5 hours at 25°C (77°F) ambient temperature and typical use	Approx. 2.5 hours at 25°C (77°F) ambient temperature and typical use
Operating Temperature Range	-15°C to 50°C (5°F to 122°F)	-15°C to 50°C (5°F to 122°F)
Storage Temperature Range	-40°C to 70°C (-40°F to 158°F)	-40°C to 70°C (-40°F to 158°F)
Shock/Vibration/Encapsulation; Safety	25 g / IEC 60068-2-29, 2 g / IEC 60068-2-6, IP 54 /IEC 60529; EN/UL/ CSA/PSE 60950-1	25 g / IEC 60068-2-29, 2 g / IEC 60068-2-6, IP 54 /IEC 60529; EN/UL/CSA/PSE 60950-1
Tripot Mounting	UNC ¼"-20	UNC ¼"-20
Weight/Dimensions w/o Lens	2.1 kg (4.6 lbs), 16.7 × 20.5 × 18.8 cm (6.6 × 8.0 × 7.4 in)	2.1 kg (4.6 lbs), 16.7 × 20.5 × 18.8 cm (6.6 × 8.0 × 7.4 in)
Box Contents		
	Infrared camera with lens, battery (2 ea) battery charger, neck strap, hard transport case, Bluetooth headset*, lens cap, power supplies, SD card, cables (Std A to Micro-B USB, HDMI to HDMI), FLIR Tools+, printed documentation	

FLIR T1010

HD Thermal Camera

The FLIR T1010 is your entry to the world of outstanding thermal imaging performance. With up to 3.1 MP resolution (UltraMax®), superior thermal sensitivity, and FLIR's most advanced user interface, the T1010 is designed to streamline your workday, and make you the hero. The FLIR T1010 comes with on-board Inspection Route mode so you can download and run survey plans to your camera from FLIR Thermal Studio Pro (with Route Creator plugin). The purchase of a T1010 camera includes a 3-month subscription to FLIR Thermal Studio Pro and FLIR Route Creator.

FLIR T1010

HD Thermal Camera

OUTSTANDING IMAGE CLARITY

See more detail and find hidden problems before they lead to costly system failures or shutdowns

- Get the best resolution of any FLIR hand-held camera with the T1K's 1024 x 768 detector
- Detect subtle temperature differences, down to <0.01°C, that may signal an electrical or mechanical problem
- Record smooth, low-noise images that are easy to interpret with FLIR Vision Processing™, featuring MSX, UltraMax®, and proprietary adaptive filtering algorithms

EXCEPTIONAL MEASUREMENT PERFORMANCE

Get accurate temperature readings from any angle or distance, so you can troubleshoot systems faster

- Pinpoint small temperature anomolies from farther away with FLIR's high-fidelity OSX Precision HDIR lenses
- Enhance measurement accuracy with UltraMax, which improves the distance to spot-size ratio
- Monitor electrical and mechanical systems with a variety of temperature conditions thanks to measurement ranges up to 650°C (1200°F)

DESIGNED FOR THE EXPERT USER

Compact format, a responsive new user-interface, and advanced reporting software make your workday more productive

- Navigate screens and set up work folders easily with intuitive, rapid-response GUI
- Adjust images and improve measurements in the camera with features such as 1-Touch Level/Span
- Analyze thermal images and report findings easily with included FLIR Tools+ software

FLIR T1010

HD Thermal Camera

Specifications	T1010	T1020
IR Resolution	1024 × 768 (786,432 pixels)	1024 × 768 (786,432 pixels)
UltraMax®	3.14 Mpixels	3.14 Mpixels
Thermal Sensitivity/NETD	<25 mK @ 30°C (86°F)	<20 mK @ 30°C (86°F)
Field of View (FOV)	45° × 34° (21 mm lens), 28° × 21° (36 mm lens), 12° × 9° (83 mm lens)	45° × 34° (21 mm lens), 28° × 21° (36 mm lens), 12° × 9° (83 mm lens)
F-Number	f/1.2	f/1.2
Lens Identification	Automatic	Automatic
Image Frequency	30 Hz	30 Hz
Focus	One-shot, manual	One-shot, manual
Digital Zoom	1-8x continuous	1-8x continuous
Detector Data		
Detector Type and Pitch	Uncooled microbolometer, 17 µm	Uncooled microbolometer, 17 µm
Spectral Range	7.5 – 14.0 µm	7.5 – 14.0 µm
Image Presentation and Modes		
Display	4.3", 800 × 480 pixel capacitive touch screen with auto-orientation	4.3", 800 × 480 pixel capacitive touch screen with auto-orientation
Viewfinder	—	Built-in, 800 × 480 pixels
Digital Camera	5 MP with built-in LED	5 MP with built-in LED
Color Palettes	Iron, Rainbow, Rainbow HC, White hot, Black hot, Arctic, Lava,	Iron, Rainbow, Rainbow HC, White hot, Black hot, Arctic, Lava,
Image Modes	Infrared, visual, MSX	Infrared, visual, MSX, Picture-in-Picture
Picture-in-Picture	—	Resizable and movable
Time-lapse (Infrared)	—	15 sec to 24 hrs
Measurement and Analysis		
Object Temperature Range	-40°C to 150°C (-40°F to 302°F), 0°C to 650°C (32°F to 1200°F)	-40°C to 150°C (-40°F to 302°F), 0°C to 650°C (32°F to 1200°F), 300°C to 2000°C (572°F to 3632°F)
Accuracy	±2°C (±3.6°F) or ±2% of reading at 25°C (77°F)	±1°C (±1.8°F) or ±1% at 25°C (77°F) for temperatures from 5°C to 150°C (41°F to 302°F)
Alarms	—	Above, below, interval, moisture, insulation
Measurement function alarm	—	Audible/visible above/below alarms on any selected measurement function
Compass, GPS	—	Yes; automatic GPS image tagging
METERLiNK®	—	Yes; several readings
Measurement Presets	No measurement, center spot, hot spot, cold spot, User Preset 1, User Preset 2	No measurement, center spot, hot spot, cold spot, User Preset 1, User Preset 2
Spotmeter	1	10
Area	1 box with max/min/avg	5 + 5 areas (boxes and circles) with max/min/avg
Laser Pointer	Dedicated button	Dedicated button
Data Storage and Streaming		
Storage Media	Removable SD card	Removable SD card
Image File Format	Standard JPEG with measurement data included	Standard JPEG with measurement data included
Radiometric IR Video Recording	—	Real-time radiometric recording (.csq)
Non-Radiometric IR or Visual Video	H.264 to memory card	H.264 to memory card
Radiometric IR Video Streaming	Yes, over USB	Yes, over USB
Non-Radiometric IR Video Streaming	H.264 over USB	H.264 over Wi-Fi or USB
Video Out	—	HDMI 640 × 480, HDMI 1280 × 720, DVI 640 × 480, DVI 800 × 600
Additional Data		
Battery Type	Rechargeable Li-ion battery	Rechargeable Li-ion battery
Battery Operating Time	Approx. 2.5 hours at 25°C (77°F) ambient temperature and typical use	Approx. 2.5 hours at 25°C (77°F) ambient temperature and typical use
Operating Temperature Range	-15°C to 50°C (5°F to 122°F)	-15°C to 50°C (5°F to 122°F)
Storage Temperature Range	-40°C to 70°C (-40°F to 158°F)	-40°C to 70°C (-40°F to 158°F)
Shock/Vibration/Encapsulation; Safety	25 g / IEC 60068-2-29, 2 g / IEC 60068-2-6, IP 54 /IEC 60529; EN/UL/ CSA/PSE 60950-1	25 g / IEC 60068-2-29, 2 g / IEC 60068-2-6, IP 54 /IEC 60529; EN/UL/CSA/PSE 60950-1
Tripot Mounting	UNC ¼"-20	UNC ¼"-20
Weight/Dimensions w/o Lens	2.1 kg (4.6 lbs), 16.7 × 20.5 × 18.8 cm (6.6 × 8.0 × 7.4 in)	2.1 kg (4.6 lbs), 16.7 × 20.5 × 18.8 cm (6.6 × 8.0 × 7.4 in)
Box Contents		
	Infrared camera with lens, battery (2 ea) battery charger, neck strap, hard transport case, Bluetooth headset*, lens cap, power supplies, SD card, cables (Std A to Micro-B USB, HDMI to HDMI), FLIR Tools+, printed documentation	

FLIR T10xx Accessories

Hard transport case (T199346ACC)

Battery (T199364ACC)

Battery Charger (T198126)

Power Supply (T910814)

Cigarette Lighter Adapter Kit, 12 VDC (T198509)

HDMI Type C to DVI cable 1.5m (T910930ACC)

HDMI type C to HDMI type A cable 1.5m (T910891ACC)

USB cable, USB-A to USB Micro-B (T198533)

IR lens, 7° FOV, 142 mm (T199745)

IR lens, 12° FOV, 83.4 mm (T199077)

IR lens, 28° FOV, 36 mm (T199064)

IR lens, 45° FOV, 21.2 mm (T199066)

Close-up lens 3× (51 µm) with case (T300065)

Neck strap (T128829ACC)

Tool belt (T911093)

Car adapter 12V (T911706ACC)

Large Eyecup (T198497)

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