



## INDUSTRIAL IMAGING CLAMP METERS

# FLIR CM174/275™

The FLIR CM174 and CM275 clamp meters combine thermal imaging with electrical measurement into powerful inspection, troubleshooting, and diagnostic tools. Through Infrared Guided Measurement (IGM™), they provide a fast, reliable way to identify hot spots and overloaded circuits from a safe distance. Confirm your findings with the clamp meters' wide range of functions plus temperature readings. The FLIR CM275 also provides wireless connectivity for direct connection to the FLIR InSite™ professional workflow management app. Whether you choose the FLIR CM174 or CM275 clamp meter, inspecting and servicing plant equipment and facilities will become safer and more efficient.



### TROUBLESHOOT FASTER & SAFER

Identify electrical issues quickly with the power of IGM

- Scan entire targets for electrical issues with up to 160 x 120 thermal resolution
- Safely check for live connections using non-contact temperature measurement
- Pinpoint exact hot spot locations with laser or crosshairs
- Easily reach difficult, dark locations thanks to narrow jaw and built-in worklights



### DIAGNOSE EFFICIENTLY

Quickly verify problems, check loads, and validate hot spots

- Diagnose complex systems with high and low voltage measurement capabilities
- Use advanced electrical features including VFD mode, True RMS, and LoZ
- Expand measurement capabilities to 3000 A AC with FLIR Flex Clamp accessories
- Rely on the protection of CAT IV-600V, CAT III-1000V safety ratings



### DOCUMENT & SHARE RESULTS

Store data or share wirelessly for improved workflow

- Store electrical measurements and thermal images internally, for later review\*
- Wirelessly connect to FLIR Tools or FLIR InSite workflow management application for streamlined documentation and sharing\*

\* FLIR CM275 model only.

## SPECIFICATIONS

Thermal Imaging	CM174	CM275	Additional Measurements	CM174	CM275
IR Resolution	80 x 60 (4,800 pixels)	160 x 120 (19,200 pixels)	Continuity Check	600 Ω	30 Ω
Thermal Imaging Detector	FLIR Lepton® microbolometer	FLIR Lepton® microbolometer	Measuring Rate	3 samples per second	3 samples per second
Temperature Sensitivity	150 mK	150 mK	Min/Max	Yes	Yes
Emissivity Settings	4 Presets with custom adjustment	4 Presets with custom adjustment	<b>General Information</b>		
Temperature Accuracy	3°C or 3%	3°C or 3%	Connectivity	–	Bluetooth®
Temperature Range	-13°F to 302°F (-25°C to 150°C)	14°F to 302°F (-10°C to 150°C)	Data Logging & Storage	–	10 sets of 40K scalar measurements, 100 images
Field of View	50.0° x 38.6°	50.0° x 38°	Jaw Opening	35 mm (1.38 in) 1250 MCM	35 mm (1.38 in) 1250 MCM
Laser Pointer	Yes	Yes	Auto Power Off	Yes	Yes
Focus	Fixed	Fixed	Worklights	Yes	Yes
Thermal Imaging Palette	Iron, Rainbow, Grayscale	Iron, Rainbow, Grayscale	Display Size	2.0 in TFT screen	2.4 in TFT screen
<b>Measurements-Both Models</b>			Battery	4 AAA batteries; optional TA04 Li-Poly rechargeable battery	3 AA batteries; optional TA04 Li-Poly rechargeable battery
True RMS	Yes		Drop Test	2 m	2 m
Auto-ranging	Yes, with manual range option		Safety Category Rating	CAT III-1000V, CAT IV-600V	CAT III-1000V, CAT IV-600V
	<b>Range</b>	<b>Basic Accuracy</b>	Size (H x W x L)	43 x 89 x 241 mm (1.7 x 3.5 x 9.5 in)	48.5 x 97 x 255 mm (1.9 x 3.8 x 10 in)
AC / DC Volts	1000 V	±1.0%	Weight	426 g (15 oz)	460 g (16 oz)
VFD AC Volts	1000 V	±1.0%	Warranty	10 year on product and detector	10 year on product and detector
AC / DC LoZ V	1000 V	±1.0%	<b>Box Contents</b>		
AC / DC Amps	600.0 A	±2.0%	Clamp Meter, batteries, silicone test leads, soft carrying case		
VFD AC Amps	600.0 A	±2.0%	<b>Ordering Information</b>		
AC Inrush	600.0 A	±3.0%	FLIR CM174 Imaging 600A AC/DC Clamp Meter with IGM		
Resistance	6.000 kΩ	±1.0%	FLIR CM275 Imaging Clamp Meter with Datalogging, Connectivity and IGM		
Capacitance	1000 μF	±1.0%			
Diode Test	1.5 V	±1.5%			
Flex Input AC A	3000 A	±1.0%			
Flex Input Frequency Counter	10.00 kHz	±0.1%			