

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 is Bluetooth-enabled for wireless transfer of thermal images and data via METERLiNK® to mobile devices running the FLIR Tools® mobile app.

www.flir.com/IGM-Clamps



TROUBLESHOOT FASTER & SAFER

Identify electrical issues quickly with the power of IGM

- Scan entire targets for electrical issues with up to 160 × 120 (CM275) 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 wirelesssly for improved workflow

- Store electrical measurements and thermal images internally, for later review*
- Simplify data and thermal imaging collection and produce instant reports by connecting via METERLiNK to a smartphone or tablet running the FLIR Tools app*

* FLIR CM275 model only.

SPECIFICATIONS

Thermal Imaging	CM174	CM275
IR Resolution	80 × 60 (4,800 pixels)	160 × 120 (19,200 pixels)
Thermal Imaging Detector	FLIR Lepton® microbolometer	FLIR Lepton® microbolometer
Temperature Sensitivity	150 mK	150 mK
Emissivity Settings	4 Presets with custom adjustment	4 Presets with custom adjustment
Temperature Accuracy	±5.4°F (±3°C) or ±3% of reading; whichever is greater	±5.4°F (±3°C) or ±3% of reading; whichever is greater
Temperature Range	14°F to 302°F (-10°C to 150°C)	14°F to 302°F (-10°C to 150°C)
Field of View	50.0° × 38.6°	50.0° × 38°
Laser Pointer	Yes	Yes
Focus	Fixed	Fixed
Thermal Imaging Palette	Iron, Rainbow, Grayscale	Iron, Rainbow, Grayscale

Measurements-Both Models		
True RMS	Yes	
Auto-ranging	Yes, with manual range option	
	Range	Basic Accuracy
AC / DC Voltage	1000 V	±1.0%
VFD AC Voltage	1000 V	±1.0%
AC / DC LoZ V	1000 V	±1.0%
AC / DC Current	600.0 A	±2.0%
VFD AC Current	600.0 A	±2.0%
AC Inrush	600.0 A	±3.0%
Resistance	6.000 kΩ	±1.0%
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%

Additional Measurements	CM174	CM275
Continuity Check	<30 Ω beeper on, >150 Ω beeper off	<30 Ω beeper on, >150 Ω beeper off
Measuring Rate	3 samples per second	3 samples per second
Min/Max	Yes	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	35 mm (1.38 in), 1250 MCM
Auto Power Off	Yes	Yes
Worklights	Yes	Yes
Display Size	2.0 in TFT screen	2.4 in TFT screen
Battery	4 AAA batteries	3 AA batteries; optional TA04 Li-Poly rechargeable battery
Drop Test	2 m	2 m
Safety Category Rating	CAT III-1000V, CAT IV-600V	CAT III-1000V, CAT IV-600V
Size (H × W × L)	43 × 89 × 241 mm (1.7 × 3.5 × 9.5 in)	48.5 × 97 × 255 mm (1.9 × 3.8 × 10 in)
Weight	426 g (15 oz)	460 g (16 oz)
Warranty	10 year on product and detector	10 year on product and detector
Box Contents		
	Clamp Meter, batteries, silicone test leads, soft carrying case (CM275 only)	

Ordering Information	Order #
FLIR CM174 Imaging 600A AC/DC Clamp Meter with IGM	793950371749
FLIR CM275 Imaging Clamp Meter with Datalogging, Connectivity and IGM	793950372753

Specifications are subject to change without notice.
For the most up-to-date specs, go to www.flir.com

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