



# FLIR CM174

Imaging 600A AC/DC Clamp Meter with IGM™

The FLIR CM174 Imaging 600A AC/DC Clamp Meter with IGM is the first clamp meter equipped with a built-in thermal imager that can quickly lead you to problems you can't see with a standard clamp meter. Featuring Infrared Guided Measurement (IGM) technology, the CM174 visually guides you to the precise location of a potential electrical problem, identifying dangerous and unknown problem areas safely. Confirm your findings with accurate amperage and voltage measurements, and center-point temperature readings. The narrow jaw enables greater accessibility, and its compact form-factor fits easily into your back pocket – so you can have thermal imaging at your fingertips everywhere you go. The FLIR CM174 will quickly become your primary electrical troubleshooting tool.

## Find problems faster with IGM.

*Visually identify electrical issues with the first thermal imaging clamp meter*

- Conquer cluttered wires and cables – IGM can quickly guide you in the right direction
- All-in-one tool – carry just one device and always have access to thermal imaging
- Work safely – scan a panel or cabinet for hazards using IGM without direct contact

## Confirm your findings.

*Verify problems, check load, and validate hot spots*

- Center-point temperature to confirm hot spot
- Amperage and voltage measurements to check the load
- Laser and crosshair pinpoint the location of the problem found in thermal image

## Solve complex electrical issues.

*Design and functionality vital to professionals*

- Narrow jaw and built-in worklights help you access difficult locations with lighting issues
- Advanced electrical features: True RMS, LoZ, VFD Mode, Inrush, Smart Diode with Disable
- Expandable to 3000 Amps AC with FLIR flex accessories



IGM technology guides you where to measure



Verify amperage measurements

# Specifications

| FLIR CM174: Imaging Clamp Meter    |   |                |
|------------------------------------|---|----------------|
| Imaging Detector                   | FLIR Lepton® microbolometer   |                |
| Thermal Image Resolution           | 4800 pixels (60 × 80)   |                |
| Field of View (V × H)              | 38.6° × 50.0°   |                |
| Color Palettes                     | Iron, Rainbow, Grayscale  |                |
| Image Frame Rate                   | 9Hz   |                |
| Temperature Measurement            | Center point of thermal image   |                |
| Temperature Range                  | -13°F to 302°F (-25°C to 150°C)   |                |
| Temperature Distance to Spot Ratio | 30:1  |                |
| Temperature Accuracy               | ±5.4°F (3°C) or ±3% of rdg  |                |
| Spectral Response                  | 8 to 14µm   |                |
| Temperature Targeting              | Class 1 Laser Pointer and Crosshair on display  |                |
| Emissivity Settings                | 4 Presets with Custom Adjustment  |                |
| Electrical Measurements            | Range   | Basic Accuracy |
| AC/DC 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 AC Current Threshold        | Min 0.5A<br>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                            | 6000 Count 2.0" (50mm) Color TFT  |                |
| Jaw Opening                        | 1.38" (35mm), 1250MCM   |                |
| Category Rating                    | CAT IV-600V, CAT III-1000V  |                |
| Certifications                     | UL, CE  |                |
| Battery Type                       | 4 x AAA   |                |
| Warranty                           | 10 Years on Product and Detector*   |                |
| Includes                           | Clamp Meter, 4 x AAA Batteries, Premium Silicone Test Leads, Quick Start, User Manual (CD), Extended Warranty Registration Card |                |

\*See FAQs at [flir.com/CM174](http://flir.com/CM174)



Test Leads Input



## USA-NASHUA

FLIR Systems, Inc.  
9 Townsend West  
Nashua, NH 03063  
USA  
PH: +1 866.477.3687

## USA-PORTLAND

Corporate Headquarters  
FLIR Systems, Inc.  
27700 SW Parkway Ave.  
Wilsonville, OR 97070  
USA  
PH: +1 866.477.3687

## EUROPE

FLIR Systems  
Luxemburgstraat 2  
2321 Meer  
Belgium  
PH: +32 (0) 3665 5100

[www.flir.com](http://www.flir.com)  
NASDAQ: FLIR

## UNITED KINGDOM

FLIR Systems UK  
2 Kings Hill Av. - Kings Hill  
West Malling  
Kent  
ME19 4AQ  
United Kingdom  
Tel: +44 (0)1732 220 011  
Fax: +44 (0)1732 843 707  
E-mail: [flir@flir.com](mailto:flir@flir.com)

Equipment described herein may require US Government authorization for export purposes. Diversion contrary to US law is prohibited. Imagery for illustration purposes only. Specifications are subject to change without notice. ©2015 FLIR Systems, Inc. All rights reserved. (Updated 09/22/15)

| Ordering Information  | UPC          | EAN           |
|---|--------------|---------------|
| FLIR CM174 Imaging 600A AC/DC Clamp Meter with IGM™         | 793950371749 | 0793950371749 |
| FLIR TA72 Universal Flex Current Probe Accessory 10" (25cm) | 793950377727 | 0793950377727 |
| FLIR TA74 Universal Flex Current Probe Accessory 18" (45cm) | 793950377741 | 0793950377741 |
| FLIR TA15 Soft Sided Carrying Case                          | 793950377154 | 0793950377154 |
| FLIR TA55 Line Splitter                                     | 793950377550 | 0793950377550 |
| FLIR TA52 Magnet Mount                                      | 793950377529 | 0793950377529 |
| FLIR TA42 Belt Clip   | 793950374207 | 0793950374207 |
| FLIR TA80 Premium Silicone Test Leads                       | 793950377802 | 0793950377802 |
| FLIR TA70 Alligator Clips                                   | 793950377703 | 0793950377703 |