



# 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 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	
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