



FLIR CM82/ CM83/CM85

True RMS Power Clamps

FLIR offers an excellent choice of industrial-grade Power Clamp Meters engineered with advanced power analysis and variable frequency drive filtering functions required by electrical troubleshooters.

- VFD Mode provides superior accuracy for working on VFD-controlled equipment
- Advanced power efficiency and harmonics measurements for system level performance analysis
- Inrush mode captures fast AC Current spikes during appliance start-up
- Phase Rotation testing ensures the motor and power source are aligned
- True RMS DMM functionality features reliable performance and expansive ranges
- Powerful LED lamps not only assist with clamping but are bright enough to serve as a primary work light

KEY FEATURES

- TRMS Voltage and Current, Power Factor, Bright White LED Backlit Display, Analog Bargraph, Integrated Non-Contact Voltage Detector, Min/Max/Average, Auto Power Off, Data Hold, Peak Hold, Relative, DCA Zero, and Battery Status

Model CM82

- 600A True RMS AC/DC Current Measurement

Model CM83 (600A) / CM85 (1000A)

- True RMS AC/DC Current Measurement
- FLIR Tools Mobile connects the FLIR CM83 to compatible smartphones and tablets via Bluetooth® for remote viewing and sharing
- METERLiNK® technology wirelessly embeds electrical clamp meter readings into radiometric infrared images captured with compatible FLIR Thermal Cameras

INCLUDES

- CAT IV Silicone Test Leads, 6 AAA Batteries, User Manual/CD, and Limited Lifetime Warranty



Specifications

TECHNICAL SUMMARY	CM82	CM83	CM85	BASIC ACCURACY
AC/DC Current	600A	600A	1000A	±2%
AC/DC Voltage	1000V	1000V	1000V	±1% / 0.7%
AC VFD Voltage	1000V	1000V	1000V	±1%
Harmonics	1st-25th Order	1st-25th Order	1st-25th Order	±5%
Total Harmonic Distortion	0.0 to 99.9%	0.0 to 99.9%	0.0 to 99.9%	±3%
Inrush Current	600ACA (Integration Time 100ms)	600ACA (Integration Time 100ms)	1000ACA (Integration Time 100ms)	±3%
Active Power	10kW to 600kW (10V, 5A min)	10kW to 600kW (10V, 5A min)	10kW to 1000kW (10V, 5A min)	±3%
Diode Test	0.4 to 0.8V	0.4 to 0.8V	0.4 to 0.8V	±0.1V
Capacitance	3.999mF	3.999mF	3.999mF	±1.9%
Resistance	99.99kΩ	99.99kΩ	99.99kΩ	±1%
Continuity Threshold	30Ω	30Ω	30Ω	±1%
Frequency	20.00Hz to 9.999kHz	20.00Hz to 9.999kHz	20.00Hz to 9.999kHz	±0.5%
Bluetooth Range Max	—	32ft (10m)	32ft (10m)	—
Jaw Opening	1.45in (37mm, 1000MCM)	1.45in (37mm, 1000MCM)	1.77in (45mm)	—
Category Rating	CAT IV-600V, CAT III-1000V			
Battery Type	6 x AAA			
Warranty	Limited Lifetime*			

* When registered within 60 days of purchase.

Ordering Information

CM82600A True RMS AC/DC Power Clamp with VFD Mode

CM82-NISTCM82 with Certificate of Traceability to NIST

CM83600A True RMS AC/DC Power Clamp with VFD Mode and METERLiNK™

CM83-NISTCM83 with Certificate of Traceability to NIST

CM851000A True RMS AC/DC Power Clamp with VFD Mode and METERLiNK™

CM85-NISTCM85 with Certificate of Traceability to NIST

Accessories

TA11.....Protective Case for CM8x and CM7x Series

TA55.....AC Current Line Splitter

TA70.....CAT IV Insulated Alligator Clips

TA80.....CAT IV Silicone Test Leads



Analyze Power-related Issues



BOSTON

FLIR Systems, Inc.
9 Townsend West
Nashua, NH 03663
USA
PH: +1 266.477.3687

NETHERLANDS

FLIR Systems, Ltd.
Charles Petitweg 21
4847 NW Breda
Netherlands
PH: +31 (0) 765.41.85

www.flir.com
NASDAQ: FLIR

PORTLAND

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

CHINA - BEIJING

Room 502, West Wing,
Hanwei Building
No. 7 Guanghua Avenue
Chaoyang District,
Beijing 100004,
China
PH: +010.59797755

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. ©2014 FLIR Systems, Inc. All rights reserved. (Created 09/14)