



# 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

CM82 .....600A True RMS AC/DC Power Clamp with VFD Mode  
 CM82-NIST .....CM82 with Certificate of Traceability to NIST  
 CM83 .....600A True RMS AC/DC Power Clamp with VFD Mode and METERLiNK™  
 CM83-NIST .....CM83 with Certificate of Traceability to NIST  
 CM85 .....1000A True RMS AC/DC Power Clamp with VFD Mode and METERLiNK™  
 CM85-NIST .....CM85 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



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