



FLIR CM78-PV

CAT III 1500 V Solar Clamp Meter

www.flir.com/CM78-PV



Key Features

- Measures solar string DC power and performance up to 1500 kVA at CAT III 1500 V rating
- Safely locates and identifies overheating components with a non-contact IR thermometer and laser pointer
- Performs accurate measurements with TRMS readings, VFD mode, and Low Impedance (LoZ) mode
- Includes CAT III-1500 V double-molded test leads and CAT III-1500 V MC4 PV plugs
- Supports wireless METERLiNK® connectivity for quick data collection and sharing

Main Applications

- Verify the performance and safety of installed solar systems
- Monitor and maintain large-scale solar power plants
- Ensure the quality of solar panels during production

SPECIFICATIONS

Electrical Measurement	Range	Accuracy
Display count	6000	
True RMS	Yes	
AC V	1000 V	±1.0%
DC V	1500 V	±1.0%
VFD AC V	1000 V AC	±2.0% at 45 Hz to 65 Hz
AC LoZ V	1000 V	±1.5%
DC LoZ V	1500 V	±1.5%
AC/DC A	1000 A	±2.0%
VFD AC A	1000 A	±5.0%
AC Inrush A	1000 A	±3.0%
Frequency counter	60 kHz	±1.0%
Resistance	60 KΩ	±1.0%
Continuity check	<50 Ω beeper on, >150 Ω beeper off	
Diode test	3.0 V	±1.5%
Capacitance	6000 µF	±3.0%
Flex AC A	3000 A	±3.0%
PV DC V	1500 V	±2.0%
PV DC Power	1500 kVA	±2.0%
Measuring rate	3 samples per second	
Over- and under-range indication	OL	

Static Datalogging and Storage	
Data storage interval	1 second
Readings per memory set	999 set per file
Connectivity	
Wireless technology	Bluetooth BLE
Communications protocol	METERLiNK
Bluetooth range	10 m (32 ft)
Power System	
Battery	6 × AAA Alkaline batteries
Battery life	Approx. 50 hours, with alkaline batteries
Auto power off	After approximately 15 minutes of inactivity
General Information	
Display	6000 count display
Worklight	2 × White LED
Jaw opening	42 mm (1.7 in)
Category rating	CAT IV-600 V, CAT III-1500 V
Warranty	Limited Lifetime Warranty
Calibration cycle	Once per year, recommended
Certifications	
Certifications	ETL, CE, FCC, FDA, RCM
Safety standards	IEC 61010-1 CAT IV-600 V, CAT III-15000 V
EMC standards	EN61326-1, EN61326-2-2, EN300328, EN301489-1, EN301489-17, EN62478, FCC PART 15B/15C



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SPECIFICATIONS, CONT.

Environmental Data	
Operating ambient temperatures and relative humidity (RH)	-10°C to 30°C (14°F to 86°F), <85% RH 30°C to 40°C (86°F to 104°F), <75% RH 40°C to 50°C (104°F to 122°F), <45% RH
Storage temperature and RH	-20°C to 60°C (-4°F to 140°F), 0 to 80% RH (without batteries)
Temperature coefficient	0.2 × (specified accuracy)/°C, <18°C (64.4°F), >28°C (82.4°F)
Operating altitude	2000 m (6560 ft)
Pollution degree	2
Meter Physical Data	
Weight	630 g (1.39 lbs)
Dimensions (L × W × H)	257 mm × 110 mm × 50 mm (10.2 in × 4.3 in × 2 in)
Included in the box	CM78-PV Carrying Pouch (TA91) CAT III-1500 V double molded test leads (TA90) CAT III-1500 V MC4 PV Plugs (TA89) 6 × AAA (LR03) Battery User Manual

Specifications subject to change. For the most up-to-date specifications, please visit flir.com.

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