

FLIR CM78-PV

CAT III 1500 V Solar Clamp Meter



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

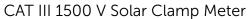
- Verify the performance and safety of installed solar systems
- Monitor and maintain large-scale solar power plants
- Ensure the quality of solar panels during production

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 ΚΩ	±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	







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.

This product is subject to United States export regulations and may require US authorization prior to export, reexport, or transfer to non-US persons or parties. Diversion contrary to US law is prohibited.

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