



FLIR PV78

Solar Irradiance and Temperature Meter with Tilt Sensor

www.flir.com/PV78



Key Features

- Instantly measures solar irradiance from 0 W to 1400 W/m² as required by IEC 62446-1 standard
- Measures solar irradiance, panel temperature, array direction, and inclination
- Compact design with external temperature probe and mounting bracket for continuous measurements
- High contrast, large LCD is easy to read in direct sunlight
- 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

Measurement	Range	Accuracy
Irradiance	50 W to 1400 W/m²	±5%
Inclination angle	–90° to 90°	±3°
Temperature from meter	–10°C to 50°C (14°F to 122°F)	±1.5°C (±2.7°F)
Temperature from external probe	–30°C to 100°C (–22°F to 212°F)	±1.5°C (±2.7°F)
Compass	0° to 360°	±7°
Measuring rate	3 samples per second	
Static Datalogging and Storage		
Data storage interval	1 minute	
Readings per memory set	360 set per file	
Connectivity		
Wireless technology	Bluetooth BLE	
Communications protocol	METERLiNK	
Bluetooth range	10 m (32 ft)	
Power System		
Battery	9 V Alkaline battery	
Battery life	Approx. 25 hours, with alkaline battery	
Auto power off	After approximately 30 minutes of inactivity	
General Information		
Warranty	Limited 3-Years Warranty https://www.flir.com/testwarranty	
Calibration cycle	Once per year, recommended	

Certifications	
Certifications	CE, FCC, RCM
EMC standards	EN61326-1, EN300328
Environmental Data	
Operating ambient temperatures and relative humidity (RH)	Meter: –10°C to 50°C (14°F to 122°F), <80% RH Probe: –30°C to 100°C (–22°F to 212°F), <80% RH
Storage temperature and RH	–20°C to 60°C (–4°F to 140°F), 0 to 80% RH (without batteries)
Operating altitude	2000 m (6560 ft)
Pollution degree	2
Meter Physical Data	
Weight	300 g (0.66 lbs)
Dimensions (L × W × H)	240.5 mm × 67 mm × 38 mm (9.5 in × 2.6 in × 1.5 in)
Included in the box	PV78 Pouch External Temperature Probe 1 × 9 V Alkaline Battery User Manual

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

For technical or sales support, please visit:
www.flir.com/about/general-inquiries

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