

SS:200LR

Wireless Irradiance Meter
Site Solar Survey Tool







The SS:200LR Wireless Irradiance Meter is designed for solar photovoltaic and solar thermal professionals to carry out on-site solar surveys.

This robust handheld instrument not only measures solar irradiance but also includes an integrated inclinometer for roof pitch, a compass for roof orientation, and thermometers for both ambient air and module temperature.

These added capabilities make the SS:200LR a highly versatile and essential instrument, helping to ensure ideal installation conditions for every system.

The SS:200LR can connect wirelessly with the PV tester PV:1525, providing real-time readings of irradiance, ambient temperature, and PV module temperature during electrical testing, to create a combined result set that can be imported into SolarCert software for the production of IEC 62446 reports.

It also features datalogging to monitor conditions over a longer period of time, for example when assessing an area for suitability to install solar PV modules.

Key Measurement Features:

- Measures irradiance, temperature, compass heading and roof pitch
- Suitable for both PV and thermal system surveys
- Allows for monitoring over a longer period of time and produces longterm measurement series
- With PV:1525:
  Accurate measurements with a distance of 150 meters between instruments for maximum flexibility

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Every. Single. Day.

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Key Features:

- Data logging function with a USB interface for downloading to a PC (as CSV file)
- Irradiance and temperature data can be recorded at user-defined intervals over several hours or days
- Versatile display suitable for both PV and thermal system surveys
- Exclusively designed for use with the PV tester PV:1525

Technical Specification:

Irradiance Measurement	
Display range	100 ... 1999 W/m² / 30 ... 633 BTU/hr-ft²
Measurement range	100 ... 1500W/m² / 30 ... 475 BTU/hr-ft²
Resolution	1 W/m² / 1 BTU/hr-ft²
Temperature Measurement	
Display range	–30 °C ... +125 °C
Measuring range	–30 °C ... +125 °C
Resolution	1°
Compass Bearing	
Display range	0° ... 360°
Measuring range	0° ... 360°
Resolution	1°
Inclinometer	
Display range	0° ... 90°
Measurement range	0° ... 90°
Resolution	1°

General Specification:

Mechanical Design	
Weight	Approx. 0.25 kg / 0.6 lb (without batteries)
Dimensions	Approx. 14.8 cm × 8.0 cm × 3.3 cm / 5.8“ × 3.2“ × 1.3“
Protective system	Housing: IP40 as per IEC 60529 (Protection against ingress of solid foreign objects: ≥ 1.0 mm / 0.039” Ø; protection against ingress of water: not protected)
Display	Custom LCD
Environmental Conditions	
Environment	Dry, without moisture condensation indoor or outdoor use
Operating temperature	+0 °C ... +40 °C / +32 °F ... +104 °F
Storage	–25 °C ... +65 °C / –13 °F ... +149 °F Dry, without moisture condensation; without battery pack

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Scope of Delivery:

- 1 × SS:200LR Wireless Irradiance Meter
- 2 × AA batteries
- 1 × USB download cable
- 1 × Solar Survey Temperature Probe
- 1 × Quick Start Guide
- 1 × Calibration certificate
- 2 × Declaration (CE, UKCA)

Technical Specification (Continued):

Power Supply	
Power source	2 × AA Alkaline batteries
Battery life	>20,000 readings
Auto power down	After · 30 min of measured darkness · 15 min from switch on with no initial pairing to a PV:1525 and no button presses · 12 hours after first switch on
Onboard memory	5000 datasets
Electrical Safety	
Pollution degree	2
Electromagnetic Compatibility (EMC)	
Interference emission	IEC 61326-1, class A
Interference immunity	IEC 61326-1
Connectivity	
Sample rate	1 ... 60 minutes (user-definable)
Connection to PV:1525	Wireless (range c. 150 m – line of sight); Long-Range RF
Frequency band(s)	433.375 MHz ... 434.625 MHz
Transmit power range(s)	4.89 dBm ERP
Modulation type(s)	CSS
Channel spacing(s)	250 kHz
Radio spectrum efficiency (Art. 3.2)	ETSI EN 300 220-2 V3.2.1
Antenna type and gain	FPC antenna, 2.8 dBi peak gain

Order Information:

Instrument	**Part Number**
SS:200LR Wireless Irradiance Meter (global version)*	396A942
*Not for USA.	
Optional Accessories	
Solar Survey – Quick release panel mounting bracket	396A979

396A5510
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