COMPLETE PHOTOVOLTAIC INSTALLATION TESTER PACK



The SOLAR-150 pack allows you to control electrical safety and performance of the photovoltaic installations. Safe and easy to use, it combines many functions.

ref. SOLAR-150



Functions of the PV150 main box:

- Ground continuity continuity measurement
- Calculation of continuous instantaneous power
- Instantaneous current measurement
- Insulation resistance measurement 250/500/1000V
- Open circuit voltage measurement up to 1000Vdc
- Measurement of short-circuit current up to 15ADC

All this information can be stored in the memory of the device (200 complete tests) and downloaded to PC in CSV format thanks to its USB connectivity. Possibility of creating certificates and professional test reports using the supplied software.

Main Features

Weight 1.04kg
Dimensions 26.4 x 10.7 x 5.8cm
Backlit LCD display
Power supply 6 x 1.5V AA
Battery life >1000 measurements
Auto power off. Programmable
Software only in ENGLISH

Functions of the SURVEY 200 secondary unit:

- Instantaneous irradiance measurement
- Instantaneous measurement of ambient temperature
- Instant measurement of panel surface temperature
- Instantaneous measurement of the inclination of the panels.

All this information can be stored in the memory of the device (200 complete tests) and downloaded to a PC in CSV format thanks to its USB connectivity.

Open Circuit Voltage Measurement (PV Terminals)

 Display Range
 0.0VDC - 1000VDC

 Measuring Range
 5.0VDC - 1000VDC

 Resolution
 0.1VDC maximum

 Accuracy
 ± (0.5 % + 2 digits)

Enunciators DC voltage polarity correct or reversed

Short Circuit Current Measurement (PV Terminals)

 Display Range
 0.00ADC - 15.00ADC

 Measuring Range
 0.50ADC - 15.00ADC

Maximum Power 10kW

Resolution 0.01ADC maximum Accuracy $\pm (1\% + 2 \text{ digits})$

Earth Continuity Resistance Measurement (4mm Terminals)

 $\begin{tabular}{lll} Test Voltage Open Circuit & >4VDC, nominal \\ Test Current into 2 Ω & >200mA \\ Display Range & 0.00Ω - 199$\Omega \\ Measuring Range (EN 61557-4) & 0.05Ω - 199$\Omega \\ Resolution & 0.01Ω maximum \\ Accuracy & \pm (2% + 5 digits) \\ \end{tabular}$

Test Leads Zero Zero up to 10Ω, by zero button Visible Warning ≥30V AC or DC at inputs

Circuitry Protection Test inhibited if ≥30V AC or DC at inputs

Repeat tests as per IEC61557-4 Approx 4000 1 second test

Insulation Resistance

(Auto Test Sequence, PV Terminals and Red 4mm Terminal)

Test Voltage Open Circuit 250V, 500V, 1000V (as per IEC61557-2)

Test Voltage Specification -0% +20% (open circuit) Test Voltage @ 1 mA >1 mA into UN x (1000 Ω /V)

Test Current Short Circuit <2mA

Display Range $0.05M\Omega$ - $199M\Omega$

Rpe Voltage Measurement (4mm Terminals)

 Display Range
 30V - 440VAC/DC

 Voltage Measuring Range
 30V - 440VDC

 30V - 440VAC 50-60Hz

Resolution 1V

Accuracy $\pm (5\% + 2 \text{ digits})$

Operating Current (via AC/DC Current Clamp)

Display Range 0.1A - 40.0A Current Measuring Range 0.1A - 40.0A DC

0.1A - 40.0A AC 50-60Hz

Resolution 0.1A

Accuracy $\pm (5\% + 2 \text{ digits})$

DC Operating Power

(via AC/DC Current Clamp and PV Terminals)

 Display Range
 0.00kW - 40kW

 Measuring Range
 0.50kW - 40kW

 Resolution
 0.01kW

 Accuracy
 ± (5% + 5 digits)



Scope of supply

- 1 main device
- 1 secondary device for irradiance and temperature measurements.
- 1 AC/DC current clamp.
- 2 MC4 test lead adapters.
- 2 measurement leads with MC4 fuse
- 2 tests leads, with test probes and detachable crocodile clips (4mm).
- 1 quick start guide.
- 1 UKAS calibration certificate.
- SolarCert and Seaward PC software (English only)
- 1 mounting bracket for the second measuring device
- 1 robust transport bag