

www.seawardsolar.com

PV150 Solar Installation Test Kit



The world's first all-inclusive solar PV specific installation electrical safety testing kit, now with Solarlink[™] and USB connectivity.

The PV150 Solar Installation Test Kit includes all of the tools needed to determine the electrical safety and performance of photovoltaic installations in line with MCS and BS EN 62446 requirements.

The kit is based around the Solar Installation PV150, which combines all test functions required to meet MCS and BS EN 62446 into one safe, easy-to-use, hand-held device. The addition of USB and wireless Solarlink[™] connectivity makes the PV150 the most versatile, safe and technically advanced solar PV tester on the market.

Transforming the way that PV systems are tested, the PV150 replaces the three separate instruments which are ordinarily used for commissioning tests; combining earth continuity, insulation resistance, open circuit voltage, short circuit current, operating current (using supplied AC/DC current) and DC operating power test functions into one handheld unit. The kit includes MC4 and Sunclix test adaptors which enable quick, safe and easy connection of the tester to the PV modules, strings or array.

As well as a comprehensive range of electrical test functions, the PV150 has memory to store up to 200 complete test records with USB connectivity to enable these to be quickly and easily downloaded to a PC. When coupled with Seaward's SolarCert Elements software program (supplied separately) professional test certificates and reports can be created.

The PV150 tester features new Solarlink[™] connectivity which further improves the versatility of the instrument. Using Seaward Solarlink[™], the PV150 can wirelessly capture and record realtime irradiance, ambient temperature and PV module temperature measurements from the Solar Survey 200R (supplied separately). This means that you can take all measurements, as required by MCS and BS EN 62446 standards, simultaneously.

KEY FEATURES:

Combines all commissioning tests required by MCS and BS EN 62446

Memory for up to 200 records

USB download to PC

Featuring new Seaward Solarlink[™]

Single key testing and measurement

Safe test connection with energised PV arrays

Earth continuity measurement

Earth test lead null (up to 10Ω) for long test-lead

PV string open circuit voltage measurement up to 1000V DC

Open circuit voltage polarity indication

PV string short circuit current measurement up to 15A DC

PV array insulation test at 250/500/1000V

Rugged and robust





TECHNICAL SPECIFICATION:

EARTH CONTINUITY

Display Range Measuring Range Resolution Open Circuit Test Voltage Short Circuit Test Current Test Lead Compensation User Protection

INSULATION RESISTANCE

Display Range Measuring Range Resolution Open Circuit Test Voltage Short Circuit Test Current Visible Warning 0.05MΩ to 199MΩ 0.05MΩ to 199MΩ 0.01MΩ maximum 250V, 500V, 1000VDC (as per IEC 61557-2) >1mA, <2mA s/c as per IEC 61557-2 ≥ 30V AC or DC at inputs

Warning and test inhibited if ≥ 30V AC/DC detected at

OPEN CIRCUIT VOLTAGE

Display Range Measuring Range Resolution Enunciators 0.0VDC to 1000VDC 5.0VDC to 1000VDC 0.1V maximum DC voltage polarity correct or reversed

SHORT CIRCUIT CURRENT

Display Range Measurement Range Resolution 0.0ADC - 15.00ADC 0.5ADC - 15.00ADC 0.01A

0.0A - 40A

0.5A - 40A

0.0kW - 40.0kW

0.1kW - 40.0kW

0.1A max

0.1kW

Rev 1

 0.00Ω to 199Ω

 0.01Ω to 199Ω

4VDC, nominal

inputs

 0.01Ω maximum

Null out up to 10Ω

>200mA (as per IEC 61557-4)

OPERATING CURRENT (USING AC/DC CURRENT CLAMP)

Display Range Measurement Range Resolution

DC OPERATING POWER

Display range Measurement ranges Resolution

DATALOGGING AND CONNECTIVITY

Datalogging

Connectivity

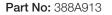
Up to 200 complete test datasets Download utility software included Compatible with SolarCert Elements software (version 1.1) USB download to PC Wireless 'Solarlink™' to Survey 200R (range c. 100m / 330ft)

GENERAL SPECIFICATIONS

Display Power Supply Battery Life Auto Power Down Custom LCD with backlight 6 x 1.5V Alkaline LR06 >1000 test sequences User programmable

ADDITIONAL INFORMATION

Warranty Period Calibration Interval 2 years 1 year UKAS Calibration Certificate supplied as standard



Solar

www.seawardsolar.com

KIT INCLUDES:

Seaward Solar Installation PV150 Tester

2 x MC4 test lead adaptors

2 x Sunclix test lead adaptors

 Test lead, red, with test probe and detachable alligator clip,

Test lead, black, with test probe and detachable alligator clip

AC/DC current clamp

Rugged carry bag

Quick Start Guide

Support CD Rom

UKAS Calibration Certificate

ACCESSORIES: (optional)

MC3 test lead adaptors

Tyco (TE) Sunlok test lead adaptors

Fused test leads - 1 pair of fused red and black test probes with alligator clips

SolarTags

PV Inspection & Test Report and PV System Verification Certificate Pads

Seaward, Bracken Hill, South West Industrial Estate, Peterlee, County Durham SR8 2SW United Kingdom

Tel: +44 (0) 191 586 3511 Fax: +44 (0) 191 586 0227 Email: sales@seaward.co.uk