

SOLAR I-Ve

Multifunction instrument for **testing single-phase PV installations**.
(THREE-PHASE with accessory MPP300)

- › **Designed to meet any requirement of PV installation testers**
- › **Single phase efficiency measurement**
- › **I-V curve up to 1500V**
- › **Voc and Isc measurement up to 1500V and 15A**
- › **Database of 30.000 PV modules curve types**
- › **Auto Start function to measure multiple strings in sequence**
- › **Compatible with the APP HTANALYSIS**

Easy identification of problems on systems which are not complying with the specifications declared by the manufacturer.

SOLAR I-Ve measures the **efficiency of single-phase PV systems** and also measures the **I-V characteristic both of a single module and of module strings on PV plants** (up to a maximum of 1500V and 10A or 1000V and 15A).

Remote irradiation and temperature measurement

Irradiation and temperature measurements play an essential role for extrapolation of the I-V characteristic under standard test conditions. **SOLAR I-Ve carries out such measurements directly or under remote mode** through the unit **SOLAR-02**, synchronized with main unit. **SOLAR I-Ve** can effect measurements at the inverter, while **SOLAR-02** simultaneously detects environmental values close to modules without using long cable extensions.

No more wasting time. It contemporarily carries out tests/recordings of 3 PV arrays.

SOLAR I-Ve can be interfaced with optional accessory **MPP300** capable of carrying out **simultaneously tests and recordings on max 3 separate arrays**, typical of multi-MPPT systems and multi-inverter systems (with MPP300).

Testing outcome: OK or NOT OK

SOLAR I-Ve compares the measured values with the values declared by the module manufacturer, **immediately providing the test result**.



Functions

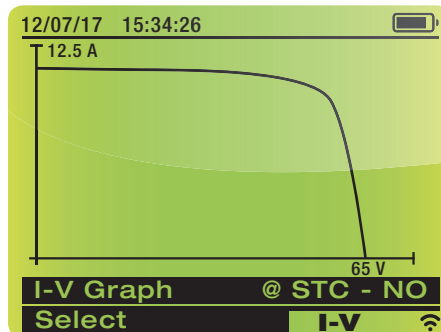
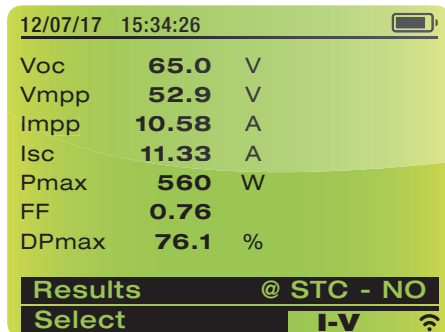
Maintenance of a PV plant

- Measurement of output voltage from module/string up to 1500VDC*
- Measurement of output current from module/string up to 15ADC*
- Measurement of solar irradiation [W/m²] with reference cell HT304N
- Measurement of temperature, automatic or by means of probe PT300N
- Measurement of output DC and nominal power from module/string
- I-V curve test with direct measurement of Irr/Temp parameters
- I-V curve test by using of SOLAR-02 unit
- Measurement of the resistance of photovoltaic module series
- Mechanical inclinometer to detect correct solar irradiation
- 4-terminal measuring method
- Comparison with standard conditions (STC 1000 W/m², 25°C)
- Evaluation of testing result: OK / NO
- Management of up to 30 types of PV modules (30000 managed by PC software)
- Internal memory for data saving
- Recalling results on the display
- Optical/USB port for PC connection
- Online Help on the display

Performance of a PV plant

- DC/AC TRMS Voltage
- DC/AC TRMS Current
- DC power
- AC active power on single-phase systems
- Solar irradiation [W/m²] with reference cell
- Temperature environmental and module by means of probe PT300N
- Synchronization with remote unit SOLAR-02
- Display of real-time irradiation and temperature
- Use of relationship to correct DC efficiency through Temperature and Irradiance measuring
- Recording of parameters with programmable IP (5s – 60min)

*1500V\10A or 1000V\15A



SOLAR I-Ve 1

Detection of IV characteristic on a string of PV modules through remote measurement of radiation and temperature



SOLAR I-Ve 2

Direct measurement of IV characteristic on a string of PV modules



SOLAR I-Ve 3

Testing of single-phase PV installation

