



MP-11 I-V Checker

Technical Specifications

Portable IV checker

High power input range 18kW

Quick measurement time

Auto measurement schedule

Sensor unit with data logger

The robust portable battery operated MP-11 I-V Checker enables the operator to perform on-site accurate I-V performance measurements and inspection of PV modules or arrays. For direct control of the measurement functions and analyzing measurement results, the Main Unit has a key-pad and Graphical LCD display. The MP-11 offers an all in one measurement solution to make PV module testing very easy, hence all required accessories like the radiation sensor, temperature sensors, cables and PC software for control and extended data analysis are included.

The MP-11 I-V Checker is capable to measure I-V curves based on the parameters (V_{max} , I_{max} , P_{max} , V_{oc} , I_{sc} , FF, T_{mod} , η_{eff}) of any PV module type and arrays, also called strings. It is highly suitable during PV module installation, for routine checks for the inspection of energy yield, tracing module performance and potential defects and general maintenance checks. The MP-11 can be used for almost any module type as long as the output fits in the range (10 -

1000V / 100mA - 30A / 10W - 18 kW).

The Main Unit is capable of measuring, displaying and analyzing data, all functions can be accessed through the front panel keypad. Up to 300 I-V curves can be stored on board, which is sufficient enough for one day. Additionally, extensive data analysis, data storage and data format conversion to a (.CSV) file format can be done using a PC with the MP-11 control software. The I-V curve measurement data displayed on the Main Unit are automatically converted into STC values, known as Standard Test Conditions (STC), values complying to the IEC 60981 and JIS C8914 Standards. This way measurement values converted to STC values can be better quantitatively compared when obtained during different environmental or atmospheric conditions (Global radiation, Temperature) or inter compared between different types of modules.

	MP-11
Measurement range Voltage	10 - 1000 V
Measurement range Current	0.1 - 30 A
Measurement range Power	10 - 18000 W
Voltage range	auto / 100V / 600V / 1000V
Voltage resolution	0.01 V
Current range	auto / 2A / 10A / 30A
Current resolution	0.01 A
Sweep time Auto sweep	4 - 640 ms
voltage and current accuracy in %	+/- 1
Measurement time	5 s
Measurement time Interval	30 s
Data points	400
Data storage Internal memory	300
Operating temperature range	0 - 45 °C
Sensor unit	Si-sensor / T-Type thermocouple
Communication	RS-422 / 232C
Power supply	12VDC, 5W / AA Bateries x 8
Dimensions mm	230 (W) x 320 (L) x 180 (H)
Weight	3 kg
Ingress protection IP	-

Specifications are subject to change without further notice.