

BENNING PV 3 – testing of solar parks, power plants and large installations with 1500 V technology

- open-circuit voltage at the PV module, PV string and PV field with up to 1500 V DC
- powerful short-circuit current measurement of PV strings connected in parallel up to 40 A
- wireless connection to insolation and temperature measuring instrument BENNING SUN 2
- memory of measured values for 999 PV string tests
- large LC display with illumination

BENNING

SOLAR

Tester for photovoltaic systems

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 scope of delivery: PV tester in robust protective case (IP 64), set of PV measuring leads (MC4), set of measuring leads with probe tip and alligator clips, charger with 3 pieces 3.7 V lithium-ion batteries and calibration certificate

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7500 × 1711 40 4

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Optional accessories:

BENNING SUN 2

Insolation and temperature measuring instrument with inclinometer and compass bearing, data logger and wireless connection

Item no. 050420



Temperature sensor with suction cup for BENNING SUN 2, for practical attachment to the PV module back

Item no. 050424

PV module holder for attachment of the BENNING SUN 2 to the PV module frame Item no. 050425



BENNING PV 3

PV tester for PV systems with 1500 V technology

Application:

Within the framework of commissioning tests and periodic inspection of grid-connected photovoltaic systems in compliance with VDE 0126-23 (DIN EN 62446), polarity tests as well as open-circuit voltage and shortcircuit current measurements of PV strings connected in parallel can be carried out, stored and documented safely and efficiently up to 1500 V/ 40 A.

With radio connection to the optional BENNING SUN 2, the existing radiation conditions (W/m²) as well as the PV module temperature and ambient temperature (°C) are automatically stored for each test procedure.

- Measuring functions: polarity test of the PV generator/ PV cabling
- open-circuit voltage measurement for modern 1500 V DC systems
- short-circuit current measurement at PV strings up to 40 A DC
 insolation measurement (W/m²) and PV module temperature and ambient temperature (°C) by means of BENNING SUN 2 (optional)

Features:

- automatic test procedure (+/-, Vo/c, Is/c, W/m², °C) with reverse polarity protection
- powerful short-circuit current measurement, reserve is up to 4 x larger than for conventional PV testers with 10 A limitation
- reduced testing times and effort for disassembly, as the individual PV strings no longer have to be separated and tested one after the other
- reduces the risk of failure due to overload during testing of PV strings of unknown power
- integrated memory of measured values for 999 PV string/ PV fields
- real-time clock with date/time stamp per measurement
- USB interface and download software (CSV format)
- large LC display with illumination
- optimum transport and storage protection (IP 64)

Technical data	BENNING PV 3
Display:	graphic display (illuminated)
Polarity test:	automatic
Open-circuit voltage (Uo/c):	5.0 V - 1500 V
Resolution/ accuracy:	max. 0.1 V/±(0.5 % + 2 digits)
Short-circuit current (Is/c):	0.5 A - 40 A (max. 45 kW)
Resolution/ accuracy:	0.01 A/±(1 % + 2 digits)
With wireless connection BENNING SUN 2:	
• Insolation:	100 W/m ² - 1250 W/m ²
• PV module/ambient temperature:	-30 °C - 125 °C
Measured value memory:	999 display indications/ PV strings
Interface:	USB type B
PC software/data format:	BENNING SOLAR Datalogger/CSV
Wireless connection BENNING SUN 2:	433 MHz
Batteries:	3 x 3.7 V 18650 lithium-ion batteries
Dimensions/weight:	340x300x152 mm/5.0 kg
Protection class:	IP 40 (open), IP 64 (closed)
Item no.:	050428

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