



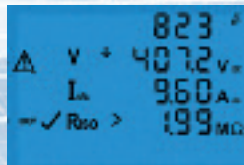
BENNING PV 1-1 installation tester for photovoltaic systems

Commissioning tests and periodic inspection of PV systems



BENNING PV 1-1 PV installation tester for testing grid-connected PV systems

- tests in compliance with VDE 0126-23 (DIN EN 62446) standard
- easy – operation by means of keys with AUTO test procedure
- quick – testing within a few seconds only
- safe – contacting by means of PV connectors



Measured values transmitted via wireless connection



Application

For commissioning tests and periodic inspection of grid-connected PV systems according to VDE 0126-23. Meets all requirements necessary for system documentation of the DC side. Ideal for troubleshooting, maintenance work and performance evaluation of PV systems.

Features of the BENNING PV 1-1

- easy and safe operation by means of keys
- automatic test procedure for polarity, open-circuit voltage, short-circuit current and insulating resistance
- RISO measurement with "PASS/FAIL" indication
- memory of measured values for 200 PV strings
- integrated real-time clock with date/time stamp for each measurement
- USB interface and download software for the preparation of test certificates in MS Excel®
- safe contacting even during energy supply of the PV system
- direct connection by means of MC4 and "Sunclix" connectors

Measuring functions

- continuity test of the protective conductor and of the equipotential bonding conductor with a testing current of 200 mA
- polarity test of the DC current cables
- open-circuit voltage for each PV string of up to 1000 VDC
- short-circuit current for each PV string of up to 15 ADC
- insulating resistance with a testing voltage of 250 V, 500 V and 1000 VDC
- DC string current and AC current by means of BENNING CC 3 current measuring clamp up to 40 A AC/DC (optional)

Radio interface "Wireless SUN Link"

- wireless connection to the insolation and temperature measurement instrument BENNING SUN 2 (optional)
- direct display of the insolation value in W/m²
- storage of the electric quantities to be measured considering the insolation and the module/ambient temperature in real time



BENNING CC 3



BENNING TA 5

BENNING PV 1-1 Installation tester for photovoltaic systems

	BENNING PV 1-1
display	graphic display (illuminated)
protective conductor resistance	0.05 Ω – 199 Ω
insulating resistance	0.2 MΩ – 199 MΩ
open-circuit voltage with polarity	5 V to 1000 V DC
short-circuit current	0.5 A to 15 A DC
DC string current/ AC current	0.2 A to 40 A DC/AC (by means of BENNING CC 3)
insolation	100 to 1250 W/m ² (by means of BENNING SUN 2)
PV module/ambient temperature	-30 °C to +125 °C (by means of BENNING SUN 2)
voltage via 4 mm sockets	30 to 440 V AC/DC
interface/radio interface	1 x USB/433 MHz signal
dimensions/weight	270 x 115 x 55 mm/2.6 kg
scope of delivery	carrying case, measuring lines, alligator clips, MC4 and "Sunclix" PV measuring lines, batteries, USB cable, download software on CD-ROM
item no.	050421



BENNING PV 1-1
scope of delivery

Optional accessories for BENNING PV 1-1

Current clamp adapter BENNING CC 3 for AC/DC current measurement 0.2 to 300 A AC/DC **item no. 044038**

Measuring line BENNING TA 5 for protective conductor measurement Line length: 40 m **item no. 044039**