

**BENNING**  
SOLAR

# SUN 2

Insolation/ temperature measuring instrument

**NEW!**  
Insolation and  
temperature measuring  
instrument for photovoltaic  
systems and solar thermal systems

VDE 0126-23, DIN EN 62446

# Insolation Module/ ambient temperature

Roof orientation and angle of inclination

*precise & reliable measurements*



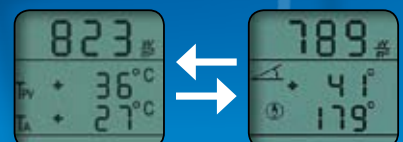
## *BENNING SUN 2 – Insolation and temperature measuring instrument for photovoltaic systems and solar thermal systems*

- Insolation measurement ( $W/m^2$ ) for PV systems according to EN 62446 and solar thermal systems
- dual-channel temperature sensor for PV module temperature and ambient temperature
- integrated compass for measuring the roof orientation and the angle of inclination
- data logger for 5,000 display indications
- real-time clock with date/ time stamp
- USB interface with download software
- precise, robust and handy
- switchable display

Recommended retail price:

**372.80 €**

All prices are exclusive of VAT.  
Item no.: 050420



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[www.benning.de](http://www.benning.de)



## BENNING SUN 2

Insolation and temperature measuring instrument with digital compass for measuring the roof orientation and the angle of inclination.

### Application:

Ideal for the planning, commissioning tests and periodic inspection of grid-connected photovoltaic systems according to EN 62446 as well as for testing solar thermal systems

### Measuring functions:

- insolation measurement in W/m<sup>2</sup> or BTU/h/ft<sup>2</sup>
- dual-channel temperature sensor for measuring the module temperature and the ambient temperature
- digital compass for determining the cardinal direction
- inclinometer for determining the module/ roof pitch

### Features:

- universal 4-in-1 measuring instrument for all testing and maintenance work as well as for economic efficiency analysis of photovoltaic systems and solar thermal systems
- calibrated PV reference cell for precise measurement of the insolation (solar irradiance)
- precise and reproducible temperature measurement by means of precision sensors
- data logger function with adjustable sampling rate (1 minute to 60 minutes) for the storage of 5000 data records including the values for insolation (solar irradiance), module temperature and ambient temperature as well as a date/ time stamp
- integrated real-time clock
- USB interface and download software for the preparation of test certificates in MS Excel®
- HOLD function for display storage
- automatic switch-off after 2 minutes
- energy-saving stand-by mode in the data logger operation
- handy and robust housing type

Technical Data	BENNING SUN 2
<b>Display</b>	graphic display
<b>Insolation</b>	
Measuring range	100 to 1250 Wm <sup>2</sup> or 30 to 400 BTU/h/ft <sup>2</sup>
Resolution/ accuracy	1 Wm <sup>2</sup> or 1 BTU/h/ft <sup>2</sup> / ± (5 % + 5 digits)
<b>Temperature (module/ ambient)</b>	
Measuring ranges	- 30°C to + 125°C
Resolution/ accuracy	1°C/ ± 1°C
<b>Compass bearing (orientation)</b>	
Measuring ranges	0° to 360°
Resolution/ accuracy	1°/ ± 10°
<b>Inclinometer</b>	
Measuring ranges	0° to 80°
Resolution/ accuracy	1°/ ± 2°
<b>Dimensions (L x W x H)</b>	150 x 80 x 33 mm
<b>Weight</b>	265 g
<b>Batteries</b>	2 x 1.5 V batteries of type AA, IEC LR 6
<b>Real-time clock</b>	date/ time stamp
<b>Measured value memory</b>	5,000 display indications
<b>Interface</b>	USB
<b>Download software</b>	on CD-ROM
<b>Scope of delivery</b>	case, protective rubber holster, module/ ambient temperature sensor, battery set, USB cable/ CD-ROM
<b>Item no.</b>	050420
<b>Recommended retail price*</b>	<b>372.80 €</b>

### Perfectly complemented by:



**PV installation tester** according to EN 62446 **BENNING PV 1** for measuring R<sub>PE1</sub>, open-circuit voltage, short-circuit current, R<sub>ISO</sub>, feed-in current per PV string  
Item no. 050400 **1.098,00 €\***

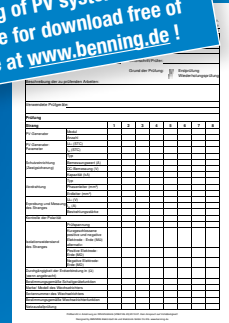


**Current clamp adapter** for the required feed-in current measurement (suitability test) of each PV string, 40 A AC/ DC **BENNING CC 3**  
Item no. 044038 **135,00 €\***

Scope of delivery of the BENNING SUN 2



Test certificate forms for „Testing of PV systems“ are available for download free of charge at [www.benning.de](http://www.benning.de) !



Your specialty retailer:

# BENNING

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