

Hand-held unit HI 1 and UV sensor SI 1

for quick and easy UV measurements



Hand-held unit HI 1



UV sensor SI 1

Hand-held unit HI 1

Features:

- Small and portable display unit for uv sensor SI 1
- large-scaled 7/16 segment display with units
- Measuring functions: Measured value, saving of maximum / minimum values, hold function
- Test functions: Range monitoring, sensor breakage indication, battery voltage check and display

Technical data:

Hand-held uni HI 1	
Art. No.	A002067
System accuracy	$\pm 0,1 \%$ of measured values ± 3 digits
Resolution	$0,5 \text{ W/m}^2$ ($= 0,05 \text{ mW/cm}^2$)
Measuring rate	2,5 mops
LC display	7 segments: Measured value 5 char, 15 mm 16 segments: Units 2 characters, 9 mm
Keypad	7 silicone keys
Operating temperature	$-10^\circ\text{C} \dots +60^\circ\text{C}$ (continuous)
Power supply	3 x AA alkaline batteries, $\leq 5 \text{ mA}$
Current consumption	approx. 10 mA without uv sensor. With connected uv sensor SI 1 in total approx. 15 mA
Weight	approx. 270 g
Dimensions (L x W x H)	approx. 125 x 80 x 40 mm
Housing material	ABS (acrylonitrile-butadiene-styrene)
Extent of the delivery	Hand-held unit including 3 AA alkaline batteries, manual
Option:	A002890 Plastic case for one Hand-held unit HI 1 and for up to three UV sensors SI 1



Note: At the hand-held unit, different uv-sensors type SI 1 (e.g. for different uv bandwidths) can be connected one after another. Only one hand-held unit for different sensors is required.

UV sensor SI 1

Applications:

To accurately measure the uv intensity at difficult to access areas or locations with high temperatures.



Features:

The uv sensor SI 1 is a robust uv measuring instrument which measures and displays in combination with the hand-held unit HI 1 the intensity of uv lamps for short-time measurements. The uv sensor of the measuring cell is built to resist temperatures up to 50°C

The uv sensor is available for different uv measuring ranges. The calibration of the sensors is saved in the special plug connector. Because of this only one hand-held unit is needed for different uv sensors.

Technical data:

UV sensor SI 1	UV-A	UV-B	UV-C	UV full	UV 320 - 395
Art. No. 20 mW/cm ² (=200 W/m ²) 200 mW/cm ² (=2000 W/m ²) 2,000 mW/cm ² (=20,000 W/m ²)	./. ./. A002069	./. ./. A002071	A002072 A003334 A002073	./. ./. A003127	A002906 (max. 20 W/cm ²)
	315...395 nm (Max. at 360 nm)	265...325 nm (Max. at 315nm)	230...280 nm (Max. at 265nm)	250...410 nm (Max. bei 330 nm)	265...495 nm (Max. at 350 nm)
Calibration	20 mW/cm ² : calibrated with UV low pressure lamp 2.000 mW/cm ² : calibrated with UV medium pressure lamp				Calibrated with UV LED at 395 nm.
Max. permissible radiation	20.000 W/m ² (up to approximately 30 sec.)				20 W/cm ² (up to 5 s)
UV sensitivity	Daylight blind				
Measurement distance	min. 10 mm with uv low pressue lamps; min. 20 mm with uv medium pressure lamps				min. 5 mm (with max. 5 s irradiation time)
Operating temperature	0...+50 °C				
Accuracy	± 5%				
Power supply	Power is applied by hand-held unit HI 1				
Current consumption	≤ 5 mA				
Dimensions (L x W x H)	approx. Ø 36 x 17 mm, Measuring cell size: approx Ø 10 mm				
Weight	approx. 100 g				
Housing material	Aluminium				
Extent of delivery	UV sensor with 1 m cable and high-grade special connector. The calibration is saved in the special plug connector.				

Notes:

SI-1 sensors for other irradiances are available upon request.

For using the uv sensor SI 1 we recommend to use the hand-held unit HI 1.

