

PYRANOMETER

SENSOR / ITEM NO.

SR20-D2 / 423.035

SR30-M2-D1 / 423.064



Figure different for SR30

DESCRIPTION OF FUNCTIONS

The SR20-D2 and SR30-M2-D1 are suitable for use in any weather conditions and have superior temperature dependence. Furthermore, its specifications have been tested and are documented for every individual instrument (as required by ISO 9060). The devices are used both in climate and water sciences as well as meteorology. With the pyranometers the entire irradiation can be measured.

The SR20-D2 offers both a RS485 Modbus interface, as well as a current interface (4 ... 20 mA).

The SR30-M2-D1 is compliant with IEC 61724-1:2017 Class A and B and offers included ventilation and heating.

	SR20-D2	SR30-M2-D1
Item-Nr.:	423.035	423.064
ISO 9060 classification:	Secondary Standard	Secondary Standard
IEC 61724-1 compliance:	Class A (when used with VU01)	Class A
Heating:	-	✓
Ventilation:	when used with VU01	✓

TECHNICAL DATA

	SR20-D2	SR30-M2-D1
Power supply:	5.5...30 V DC	8...30 V DC
Operating temperature:	-40 ... 80 °C	
Protection class:	IP67	
Dimensions:	H: 85 mm (with dome) / Ø 150 mm (enclosure)	H: 95 mm (with dome) / Ø 92 mm (enclosure)
Analog output (4...20 mA):	✓	
Measuring range:	0 ... 1600 W/m ²	-
Power consumption (at 12 V DC):	< 115 mW	
Bus interface (RS485)	✓	✓
Measuring range:	0 ... 4000 W/m ²	0 ... 4000 W/m ²
Power consumption (at 12 V DC):	< 75 mW	< 3 W *

* By default, heater and ventilator are both switched on

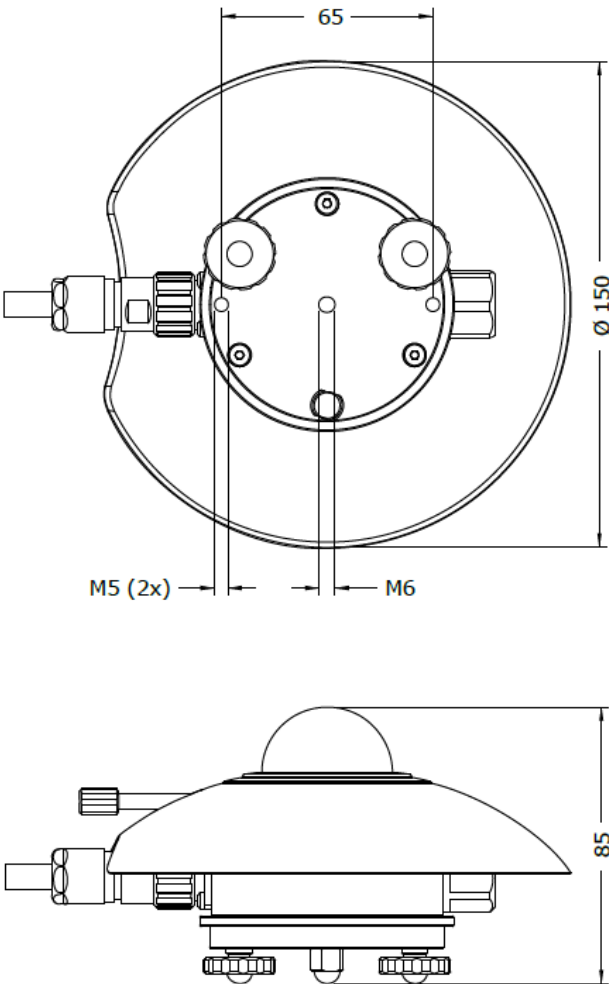
	SR20-D2	SR30-M2-D1
Calibration registers:	Accessible to users on request	
Calibration uncertainty:	< 1.2 % (k = 2)	
Spectral range:	285...3,000 nm	
Response time (95 %):	3 s	
Zero offset a:	5 W/m ² unventilated	
Zero offset b:	< ± 2 W/m ²	
Non-stability:	< ± 0.5 % change per year	
Non-linearity:	< ± 0.2 % (100 ... 1,000 W/m ²)	
Directional response:	< ± 10 W/m ²	
Directional response test of individual instrument:	test report included	
Temperature response:	< ± 0,4 % (-30 ... 50 °C)	
Temperature response test of individual instrument:	test report included	
Tilt response:	< ± 0.2 % (0 ... 90 °C at 1,000 W/m ²)	
Achievable accuracy for daily sums:	2 %	

CONFIGURATION

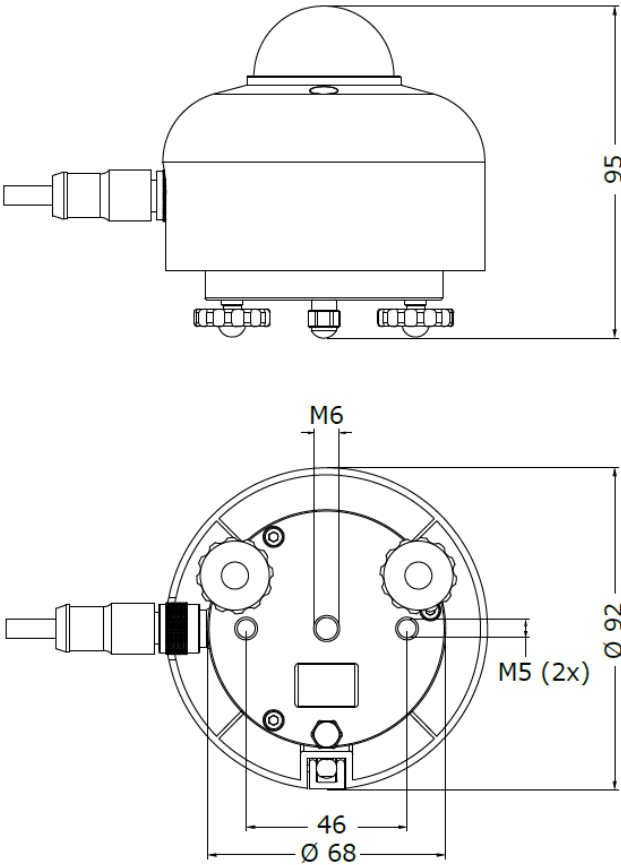
	SR20-D2	SR30-M2-D1
Analog output (4...20mA):		
Gradient:	100	-
Offset:	-400	-
Unit:	W/m ²	-
Bus interface (RS485)		
Interface:	RS485	
Protocol:	Modbus RTU	
Baud rate:	19,200 bps	
Data format:	8N1	
Default slave address:	51-60, see identification label	

SCALE DRAWING

SR20-D2



SR30-M2-D1



Further information: www.meteocontrol.com