SolarTemp® 851

-60...650°C



851

Highlights

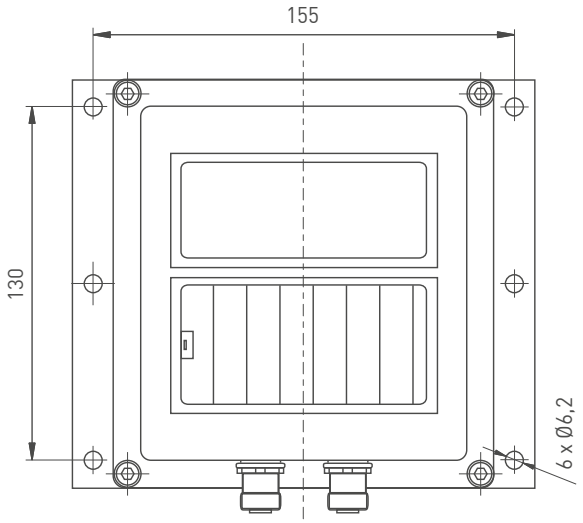
- **Powered by the current loop itself with backup via solar cell**
  → temperature display even in the case of power supply failure
- One measuring point for local display and transmitter signal
  → no measured value deviation & lower costs per measuring point
- Robust mechanical construction → Reliable and long-lasting operation
- Insensitive to electromagnetic interference → Additional EMC shielding
- Integrated transmitters → Simple integration into process control system
- Two separate measuring circuits and continuous self-test → Maximum operational reliability

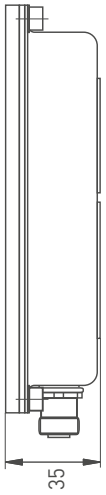
Technical data	
Version	Straight
Dimensions → Housing → With mounting plate	 140 x 150 x 30 (W x H x D) 170 x 150 x 35 (W x H x D)
Measuring range	-60…650 °C
Medium / Application	Liquid and gaseous media
Display	3½ digit, 7 segment LCD, 25 mm high
Resolution	0.1 K in the range <200 °C 1 K in the range >200 °C
Measuring rate	3 s
Ambient temperature	5…60 °C
Storage temperature	5…60 °C
Degree of protection EN 60529	IP65
Approvals	
EU RO Mutual Recognition Type Approval Certificate (pending) (Covers: ABS, BV, CCS, CRS, DNV, IRS, KR, LR, ClassNK, PRS, RINA, RS)	

Electrical data	
Measuring element	Pt1000 / 2-wire / Class B
Accuracy	±1 % of range ±1 digit
Electrical connection	4-pin plug connector M12 x 1
Supply voltage	Loop supply 15...26 VDC Solar cell, 80 lux (as backup for display)
Analogue output	
Current signal	4...20 mA / 2-wire
Scaling	Measuring range
Signal error	Error signal according to NAMUR NE43
Burden	Max. 500 Ω

Grubatec AG - Gewerbehaus Ergolz, Wölferstrasse 5 - 4414 Füllinsdorf
Telefon: +41 (0)55 617 00 80 - www.grubatec.ch - sales@grubatec.ch

Technical drawings // Dimensions

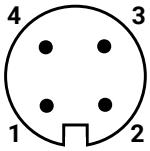




Pin assignment

Transmitter output / Supply Voltage M12 (plug / male)

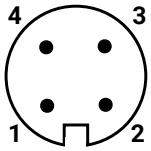
Pin assignment



Pin 1: GND/Sig-
Pin 3: +UB/Sig+

Sensor input M12 (socket / female)

Pin assignment



Pin 1 / 2: Pt1000 for the display
Pin 3 / 4: Pt1000 for the transmitter 4...20mA

Materials

Materials	
Not in contact with medium	
Housing	Powder-coated steel, glass front window

Article numbers

SolarTemp type 851		
Transmitter output range	**Display range**	**Article number**
0...300 °C	-60...650 °C	85165P53330
0...600 °C	-60...650 °C	85165P53360

Grubatec AG - Gewerbehaus Ergolz, Wölferstrasse 5 - 4414 Füllinsdorf
Telefon: +41 (0)55 617 00 80 - www.grubatec.ch - sales@grubatec.ch

Accessories



Connection cable

Order code			
Accessories		**Length**	**Order number**
	Sensor cable Connection cable with cable plug M12 x 1, 4 pin version, shielded Cable: FEP cable 4 x 0.5 mm²	3 m 5 m 10 m 15 m	XPV108 XPV109 XPV110 XPV158
	Transmitter cable Connection cable with cable socket M12 x 1, 4 pin version, shielded Cable: FEP cable 4 x 0.5 mm²	10 m 15 m	XPV150 XPV167