

Outside temperature / wet room temperature measuring transducers, calibratable, with multi-range switching and active output

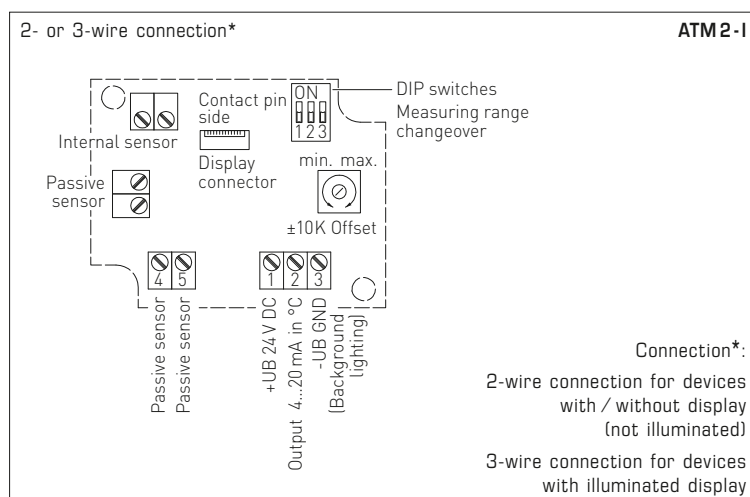
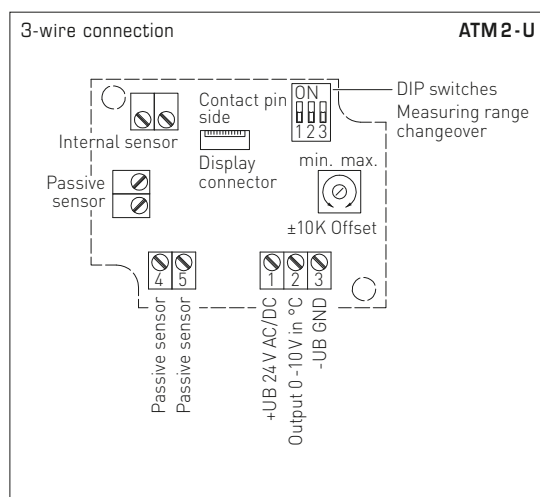
Calibratable outside temperature measuring transducer **THERMASGARD® ATM 2** with eight switchable measuring ranges, internal or remote sensor, continuous output, terminal box enclosure made of impact-resistant plastic, enclosure cover with quick-locking screws, with or without optional display. For the detection of outside temperatures, temperatures in wet room areas, e.g. for installation on outside walls, in cold storage buildings and greenhouses, in the industrial sector and in agriculture. Installation in outdoor areas preferably at the north side of a building or in a protected place. In case of direct sun irradiation, the sunshade and ball game protection **WS01** (accessories) or the device variant with the installed sunshade **SS02** (available on request) must be used. These outdoor sensors are factory-calibrated. Adjustment / fine adjustment by the user is possible (zero point offset is adjustable).

ATM 2



TECHNICAL DATA	
Power supply:	24 V AC / DC (± 10 %) for U variant 15...36 V DC for I variant, depending on working resistance, residual ripple stabilised ± 0.3 V
Working resistance:	$R_a(\text{ohm}) = (U_b - 14 \text{ V}) / 0.02 \text{ A}$ for I variant
Load resistance:	$R_L > 5 \text{ kOhm}$ for U variant
Power consumption:	< 1.0 VA / 24 V DC; < 2.2 VA / 24 V AC
Sensor:	Pt1000, DIN EN 60751, class B, (Perfect Sensor Protection) sensor inside external stainless steel sensor tube, 1.4571, V4A
Measuring ranges:	multi-range switching with 8 switchable measuring ranges, see table (other ranges optional) operating range -30...+70 °C with manual zero point correction (± 10 K)
Deviation, temperature:	± 0.2 K at +25 °C
Output:	0 - 10 V or 4...20 mA
Ambient temperature:	measuring transducer -30...+70 °C
Connection type:	2- or 3-wire connection
Process connection:	by screws
Enclosure:	plastic, material polyamide, 30 % glass-globe-reinforced, with quick-locking screws , (slotted / Phillips head combination), colour traffic white (similar to RAL 9016), enclosure cover for display is transparent!
Enclosure dimensions:	72 x 64 x 37.8 mm (Tyr 1 without display) 72 x 64 x 43.3 mm (Tyr 1 with display)
Cable gland:	M 16 x 1.5, including strain relief, exchangeable, max. inner diameter 10.4 mm
Electrical connection:	0.14 - 1.5 mm ² via terminal screws
Humidity:	< 95 % r. H., non-precipitating air
Protection class:	III (according to EN 60 730)
Protection type:	IP 65 (according to EN 60 529)
Standards:	CE conformity, electromagnetic compatibility according to EN 61326, according to EMC directive 2014 / 30 / EU
Optional:	Two-line display with illumination , cutout approx. 36 x 15 mm (W x H), for displaying the ACTUAL temperature and the internal diagnostics (measuring range exceeded, measuring range not reached, sensor breakage, sensor short circuit) see beginning of this chapter!

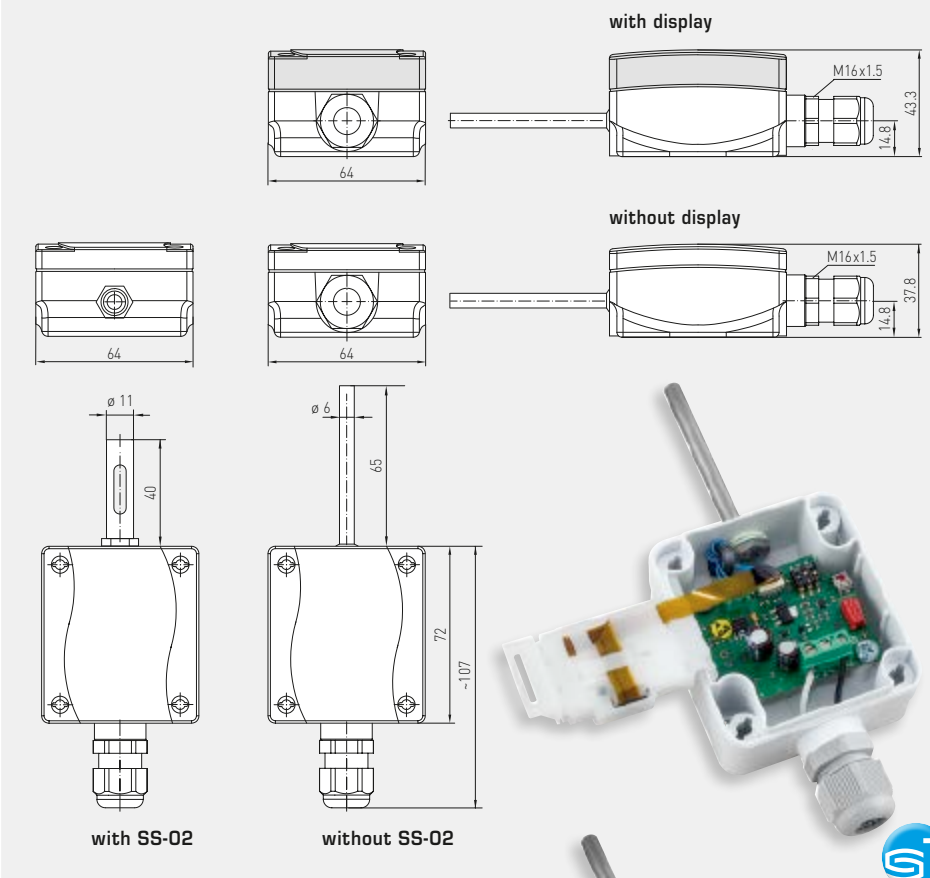
ATM 2
with SS-02





Dimensional drawing

ATM 2



ATM 2 with display



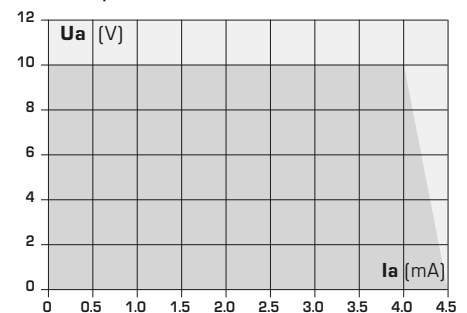
High-performance encapsulation against vibration, mechanical stress and humidity

PS-PROTECTION
PERFECT SENSOR PROTECTION

Measuring ranges (adjustable)	DIP 1	DIP 2	DIP 3
-20...+150 °C	ON	ON	ON
-50... +50 °C	OFF	ON	ON
-20... +80 °C	ON	OFF	ON
-30... +60 °C	OFF	OFF	ON
0... +40 °C	ON	ON	OFF
0... +50 °C	OFF	ON	OFF
0...+100 °C	ON	OFF	OFF
0...+150 °C	OFF	OFF	OFF



Dependency of output voltage on output current



THERMASGARD® ATM 2 – Outside temperature / wet room temperature measuring transducers					
Type / WG01	Sensor	Output	Display	Item No.	Price
ATM 2-I					
IP65, I-variant					
ATM2-I	Pt1000	4...20 mA		1101-1142-0009-900	84,79 €
ATM2-I_DISPLAY	Pt1000	4...20 mA	■	1101-1142-2009-900	127,74 €
ATM 2-U					
IP65, U-variant					
ATM2-U	Pt1000	0-10 V		1101-1141-0009-900	84,79 €
ATM2-U_DISPLAY	Pt1000	0-10 V	■	1101-1141-2009-900	127,74 €
Extra charge:	Other ranges optional with sunshade SS02			on request	21,42 € 8,21 €
Accessories					
WS-01	Sunshade and ball game protection, 184 x 180 x 80 mm, stainless steel			7100-0040-2000-000	26,80 €
WS-04	Sunshade and weather protection, 130 x 180 x 135 mm, stainless steel			7100-0040-7000-000	31,62 €

For further information see last chapter!