

**Outside temperature / wet room
temperature measuring transducers, calibratable,
with Modbus connection**

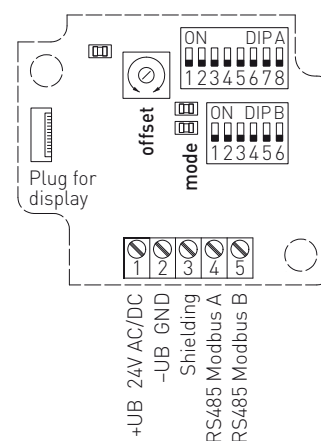
Calibratable outside temperature measuring transducers with internal or remote sensor **THERMASGARD® ATM 2 - Modbus** with Modbus connection, enclosure made from impact-resistant plastic with quick-locking screws, with /without optional display (for displaying actual temperature).

For the detection of outside temperatures, temperatures in wet rooms, e.g. for installation in outside walls, in cold storage buildings and greenhouses, in the industrial sector and in agriculture. Installation of the temperature transmitter in outside areas preferably at the north side of the building or in a protected place. In cases of direct solar irradiation, we recommend the use of our **WS01** or **WS04** sun protection hood (accessory) or the device version with installed sun protection hood **SS02** (available upon request). The outdoors sensors are factory-calibrated. Adjustment / fine adjustment by the user is possible (zero point offset is adjustable).

TECHNICAL DATA

Voltage supply:	24 V AC ($\pm 20\%$) and 15...36 V DC
Power consumption:	< 1.0 VA / 24 V DC < 2.2 VA / 24 V AC
Sensor:	Pt1000, DIN EN 60751, class B (Perfect Sensor Protection)
Measuring range:	-50...+150 °C
Temperature deviation:	± 0.2 K at +25 °C
Zero point offset:	± 10 °C
Ambient temperature:	Measuring transducer -30...+70 °C
Medium:	clean air and non-aggressive, non-combustible gases
Error detection:	sensor breakage, sensor short circuit
Bus protocol:	Modbus (RTU mode), address range 0... 247 selectable
Signal filtering:	0.3 s / 1 s / 10 s
Process connection:	by screws
Enclosure:	plastic, UV-stabilised, 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:	2x M12 x 1.5 (Y-adapter); with strain relief, exchangeable, max. inner diameter 6 mm
Permissible air humidity:	< 95 % r. H., non-precipitating air
Protection class:	III (according to EN 60 730)
Protection type:	IP65 (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 , programmable, cutout approx. 36 x 15 mm (W x H), for displaying the actual temperature or an individually programmable display value (The Modbus interface allows the display to be individually configured in the 7-segment area and in the dot-matrix area.)
ACCESSORIES	see table
MODBUS-Y	Y-adapter for cable gland M16x1.5 (on 2x M12x1.5), plastic (included in the scope of delivery)

ATM 2 - Modbus

ATM 2 - Modbus
with SS-02Schematic diagram **THERMASGARD® MODBUS**

DIP A: Bus address
DIP B: Bus parameters
(Baud rate, parity ...)

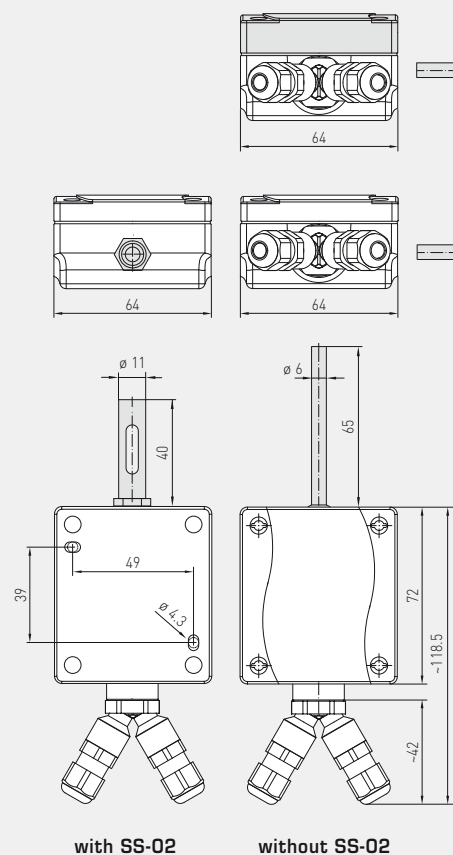
 Telegram indicator
 Reception (LED green)
 Error (LED red)

 LED (internal status)

 Offset correction
temperature: ± 10 °C

 Plug for display
contact is
on the right side

Dimensional drawing

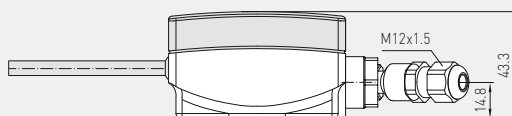


High-performance encapsulation against vibration, mechanical stress and humidity



ATM 2 - Modbus

with display



without display



ATM 2-Modbus with display



Type / WG01	Sensor	Output	Display	Item No.	Price
ATM 2 - Modbus					
ATM2-MODBUS	Pt1000	Modbus		1101-1246-0000-000	
ATM2-MODBUS DISPLAY	Pt1000	Modbus		1101-1246-2000-000	
Extra charge:	with sun protection hood SS 02				on request
Accessories					
KA-2	Modbus communication adapter with USB/RS485 interface for system connection or/and as an active bus termination resistance				on request
WS-01	Sun and ball-impact protection hood , 184 x 180 x 80 mm, stainless steel				7100-0040-2000-000
WS-04	Weather and sun protection hood , 130 x 180 x 135 mm, stainless steel				7100-0040-7000-000
For further information, see last chapter Accessories!					