

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

Calibratable outside temperature measurement transducer **THERMASGARD®**
ATM 2 - Modbus - T3 with Modbus connection, in an impact-resistant plastic housing
with quick-locking screws, optionally with / without display.

The on-wall sensor is used to detect the temperature in gaseous media. It is used outside
or in wet rooms, in cold storage buildings and greenhouses, in the industrial sector and in
agriculture. Installation on outside walls is preferably performed on the north side or in a
protected place. In case of direct solar irradiation, we recommend using our sun and
ball-impact protection hood **WS01** or **WS04** (accessories).

Innovative Modbus sensor with galvanically separated RS485 Modbus interface, selectable
bus termination resistance, DIP switch for setting the bus parameters and bus address in
current-free state, LEDs for telegram status display, two separate push-in terminals and
large three-line display (illuminated,
with customised programming in the 7-segment range and dot-matrix range). Uses **internal
diagnostics** to detect sensor breakage or sensor short circuit as errors. The error messages
can be retrieved via Modbus and are shown on the display. The sensor is factory-calibrated;
an environmental precision adjustment by an expert is possible.

TECHNICAL DATA

Voltage supply:	24 V AC ($\pm 20\%$) and 15...36 V DC
Power consumption:	< 1,2 W / 24 V DC; < 1,8 VA / 24 V AC
Sensor:	Pt1000, DIN EN 60751, class B
Measuring range:	-50...+150 °C
Temperature deviation:	typically $\pm 0,2$ 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
Bus protocol:	Modbus (RTU mode), address range 0... 247 selectable
Signal filtering:	0,3 s / 1 s / 10 s
Process connection:	by screws
Housing:	plastic, UV-stabilised, material polyamide, 30 % glass-globe reinforced, with quick-locking screws (slotted / Phillips head combination), colour traffic white (similar to RAL 9016), housing cover for display is transparent!
Housing dimensions:	108 x 78,5 x 43,3 mm (Tyr 3 without display) 108 x 78,5 x 45,8 mm (Tyr 3 with display)
Cable connection:	cable gland , plastic (2x M20 x 1,5; with strain relief, exchangeable, inner diameter 8 - 13 mm) or M12 connector according to DIN EN 61076-2-101 (optional on request)
Electrical connection:	0,2 - 1,5 mm ² , using push-in terminals
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
Equipment:	Display with illumination , three-line, programmable, cutout approx. 51 x 29 mm (W x H), for displaying the actual temperature or an individually programmable display value
Internal diagnostics:	Error 1 at sensor breakage Error 2 at sensor short circuit
ACCESSORIES	see table

ATM 2 - Modbus - T3

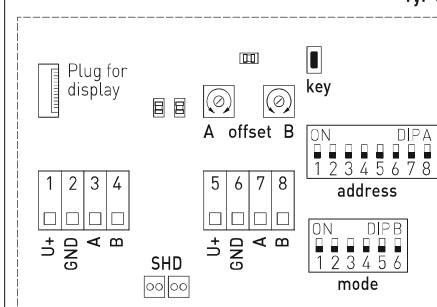


Device variant
with **M12 connector**
(optional on request)



Schematic diagram

**Modbus
Tyr 3**



DIP A: Bus address
DIP B: Bus parameters (Baud rate, parity...)
Telegram indicator Reception (LED green) Error (LED red)
LED (internal status)
Offset correction
Reset button
Shielding

Programmable
display screen

**Modbus
Tyr 3**



**NEW**

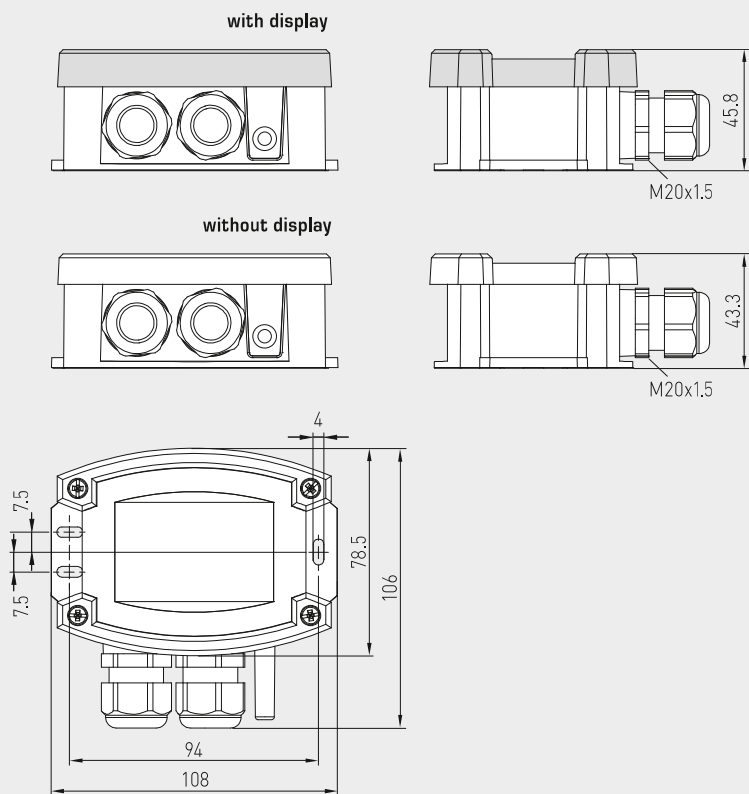
S+S REGELTECHNIK

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Dimensional drawing

ATM 2 - Modbus - T3

ATM 2 - Modbus - T3
with display**HYGRASGARD® ATM 2 - Modbus - T3** Outside temperature / wet room temperature measuring transducers

Type / WG01	Sensor	Output	Display	Item No.
ATM 2 - Modbus - T3				
ATM2-MODBUS-T3	Pt1000	Modbus		1101-12C6-0000-000
ATM2-MODBUS-T3 LCD	Pt1000	Modbus	■	1101-12C6-4000-000
Optional:	Cable connection with M12 connector according to DIN EN 61076-2-101			on request

ACCESSORIES

KA2-Modbus	Communication adapter (with USB and RS485 interface) for system connection (incl. quick-start software)	1906-1200-0000-100
LA-Modbus	Line termination device (with terminating resistor) as an active bus termination of RS485 networks	1906-1300-0000-100
WS-01	Sun and ball-impact protection hood , 184 x 180 x 80 mm, stainless steel V2A (1.4301)	7100-0040-2000-000
WS-04	Weather and sun protection hood , 130 x 180 x 135 mm, stainless steel V2A (1.4301)	7100-0040-7000-000

For further information, see last chapter Accessories!