

Surface contact temperature / tube contact temperature measuring transducers, incl. strap, compact variant, calibratable, with Modbus connection

ALTM1 - Modbus
(compact)

Calibratable tube contact temperature measuring transducers with strap
THERMASGARD® ALTM1 - Modbus with Modbus connection, enclosure made from impact-resistant plastic with quick-locking screws, with /without optional display (for displaying actual temperature).

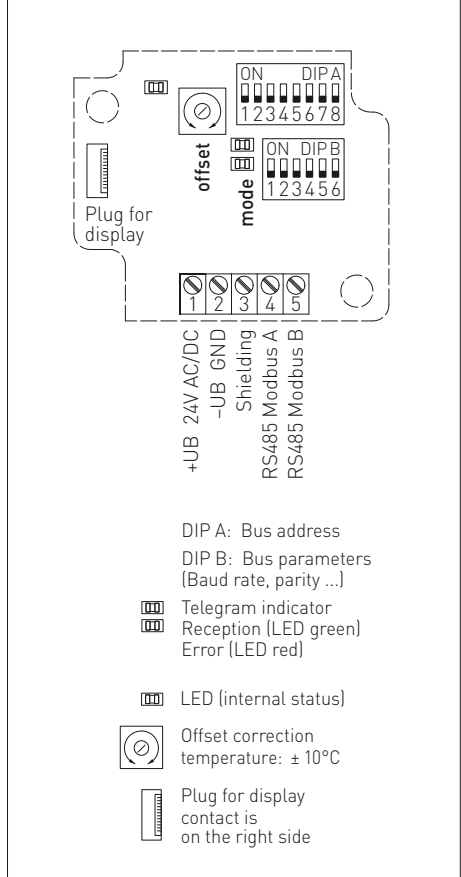
The surface contact sensor is used for temperature detection on piping, tubes (e.g. cold- and hot-water) or on heating sections for heating system control. The tube sensors are factory-calibrated. Adjustment /fine adjustment by the user is possible (zero point offset is adjustable).



TECHNICAL DATA

Voltage supply:	24 V AC (±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 Compact variant: T_{max} up to +100 °C
Temperature deviation:	±0.2 K at +25 °C
Zero point offset:	± 10 °C
Ambient temperature:	Measuring transducer -30...+70 °C
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:	endless metal strap and metal tightener (included in scope of delivery)
Strap dimensions:	Ø = 13 - 92 mm (¼ - 3"), L = 300 mm
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 M 12 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)

Schematic diagram **THERMASGARD® MODBUS**

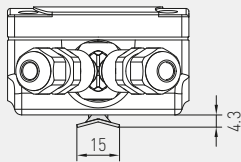
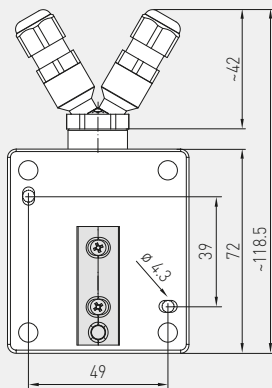




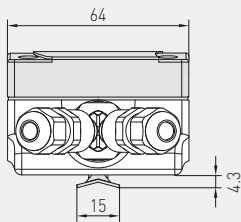
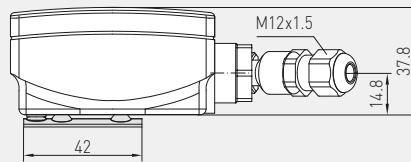
S+S REGELTECHNIK

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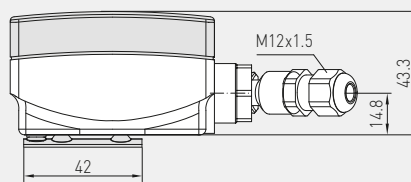
Dimensional drawing



without display



with display



ALTM1 - Modbus



ALTM1 - Modbus with display (compact)



High-performance encapsulation against vibration, mechanical stress and humidity



THERMASGARD® ALTM 1 - Modbus – Surface contact temperature / tube contact temperature measuring transducers

Type / WG01	Sensor	Output	Type	Display	Item No.	Price
ALTM 1 - Modbus						
ALTM1-MODBUS	Pt1000	Modbus	Compact		1101-1216-0000-000	
ALTM1-MODBUS DISPLAY	Pt1000	Modbus	Compact	■	1101-1216-2000-000	

Accessories

KA-2	Modbus communication adapter with USB/RS485 interface for system connection or/and as an active bus termination resistance	on request
WLP-1	Heat-conductive paste, set	7100-0060-1000-000

For further information, see last chapter Accessories!

