

Surface contact temperature / tube contact temperature measuring transducers, incl. strap, with detached sensor head, calibratable, with Y-adaptor, with Modbus connection (not galvanically isolated)

ALTM 2 - Modbus-SD
(with detached sensor head)

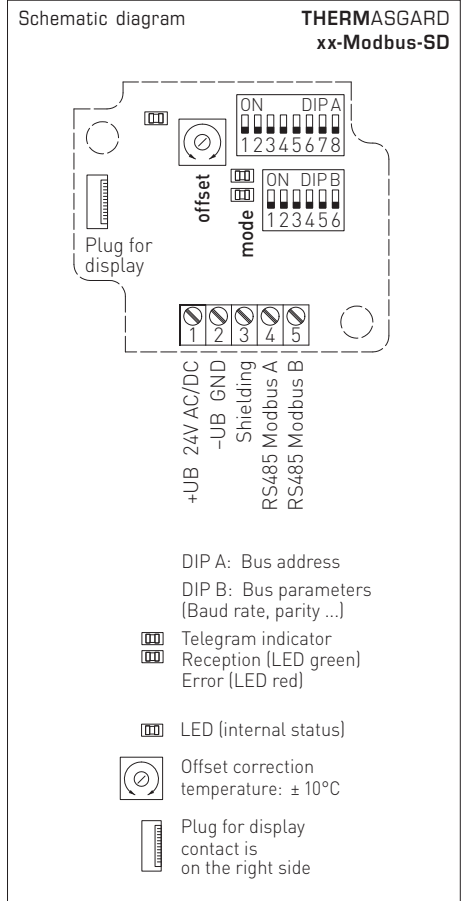
Calibratable surface-contact temperature measuring transducer (detached variant) THERMASGARD® ALTM 2 - Modbus-SD, with Modbus connection (Y-adaptor), in an impact-resistant plastic housing with quick-locking screws, cable sensor with pipe feeder, incl. strap, optionally with /without display, measures temperature (-50...+150 °C).

The pipe surface-contact sensor is used to detect the temperature on lines, pipes (e.g., cold and warm water) or on heating sections for heating control.

Modbus sensor SD with RS485 Modbus interface (not galvanically isolated), selectable bus termination resistance, DIP switch for setting the bus parameters and bus address in current-free state, internal LEDs for telegram status display (illuminated, with customised programming). Uses internal diagnostics to detect sensor breakage or sensor short circuit as errors. The sensor is factory-calibrated; an environmental precision adjustment by an expert is possible.

TECHNICAL DATA

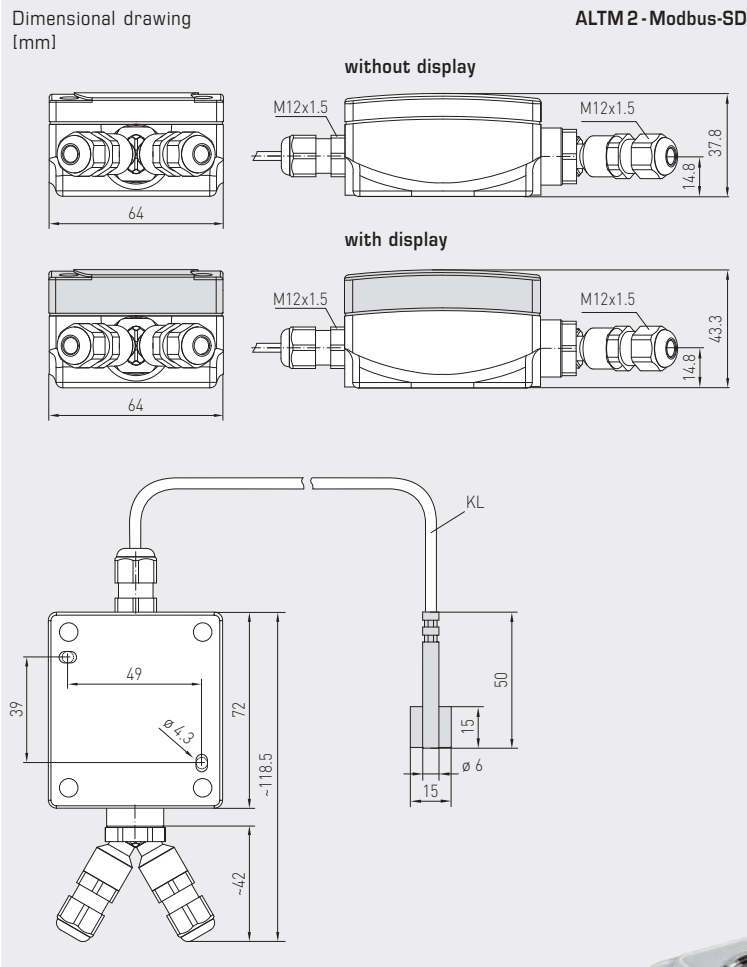
Voltage supply:	24 V AC (±20%) and 15...36 V DC (±10%)
Power consumption:	< 1.0 W / 24 V DC < 2.2 VA / 24 V AC
Sensor:	Pt1000, DIN EN 60751, class B (Perfect Sensor Protection at IP68)
Measuring range:	-50...+150 °C, T _{max} at +150 °C (detached sensor variant)
Temperature deviation:	typically ±0.2 K at +25 °C
Zero point offset:	±10 °C
Medium:	clean air and non-aggressive, non-combustible gases
Error detection:	sensor breakage, sensor short circuit
Communication:	RS485 interface, not galvanically isolated, Bus termination activatable via DIP switches.
Bus protocol:	Modbus (RTU mode), address range 0...247 selectable
Baud rate:	9600, 19200, 38400 Baud
Signal filtering:	0.3 s / 1 s / 10 s
Insulating resistance:	≥100 MΩ, at +20 °C (500 V DC)
Sensor protection:	pipe feeder made of stainless steel V4A (1.4571), Ø = 6 mm, L = 50 mm
Sensor cable:	silicone, SiHF, 2 x 0.25 mm ² ; cable length (KL) = 1.5m (other lengths and jacket materials, e.g. PTFE or glass fibre with steel mesh, available on request)
Housing:	plastic, UV-resistant, 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 dimension:	72 x 64 x 37.8 mm (Tyr 1 without display) 72 x 64 x 43.3 mm (Tyr 1 with display)
Cable connection:	cable gland, plastic 2 x M12 x 1.5 (Y-adaptor); with strain relief, exchangeable, max. inner diameter 6 mm
electrical connection:	0.14 - 1.5 mm ² , via terminal screws
Process connection:	endless strap with metal tightener included in the scope of delivery)
Strap dimensions:	Ø = 13 - 92 mm (1/4 - 3"), length L = 300 mm
Ambient temperature:	measuring transducer -30...+70 °C
Permissible humidity:	<95% RH, non-precipitating air
Protection class:	III (according to EN 60730)
Protection type housing:	IP65 (according to EN 60529) housing tested, TÜV SÜD, Report No.713139052 (Tyr 1)
Protection type sensor:	IP65 (according to EN 60529) sleeve humidity-tight (standard) IP68 (according to EN 60529) sleeve water-tight (optional)
Standards:	CE conformity, electromagnetic compatibility according to EMC directive 2014 / 30 / EU, EN 61326
Optional:	display with illumination, two-line, programmable, cutout approx. 36x15 mm (W x H), for displaying the actual temperature, error message or an individually programmable display value
ACCESSORIES	(see table)





S+S REGELTECHNIK

Surface contact temperature / tube contact temperature measuring transducers, incl. strap, with detached sensor head, calibratable, with Y-adapter, with Modbus connection (not galvanically isolated)



ALTM 2 - Modbus-SD
with display
(with detached sensor head)



* High-performance encapsulation against vibration, mechanical stress and humidity



THERMASGARD® ALTM 2 - Modbus - SD		Surface contact temperature / tube contact temperature measuring transducers with Modbus connection (not galvanically isolated)			
Type / WG01B	Output	Type	Display	Item No.	Price
ALTM 2 - Modbus - SD					
ALTM 2 - Modbus-SD	Modbus	Remote sensor		1101-6256-0210-120	140,31 €
ALTM 2 - Modbus-SD LCD	Modbus	Remote sensor	■	1101-6256-2210-120	192,75 €
Extra charge:	Protection type IP 68 (sensor sleeve watertight compound-filled) pper running metre of connecting lead (silicone/PTFE/glass fibre)				3,50 € on request
ACCESSORIES					
KA2-Modbus	Communication adapter (USB/RS485) for system connection			1906-1200-0000-100	220,41 €
LA-Modbus	Line termination device (with terminating resistor) as an active bus termination			1906-1300-0000-100	82,20 €
WLP-1	Heat-conductive paste , silicone-free			7100-0060-1000-000	4,79 €

For further information, see last chapter Accessories!