

**Sleeve sensor with temperature measuring transducer, calibratable, with Y-adapter, with Modbus connection (not galvanically isolated)**

Calibratable sleeve temperature measuring transducer **THERMASGARD® HFTM-Modbus-SD**, with Modbus connection (Y-adapter), in an impact-resistant plastic housing with quick-locking screws, cable sensor with a stainless steel sleeve, optionally with /without display, measures temperature (-50...+150 °C).

The sleeve sensor is used to detect the temperature in liquid and gaseous media. It is used as a duct sensor or, if installed in immersion sleeve **THE** (accessories), as an immersion and screw-in sensor in liquids.

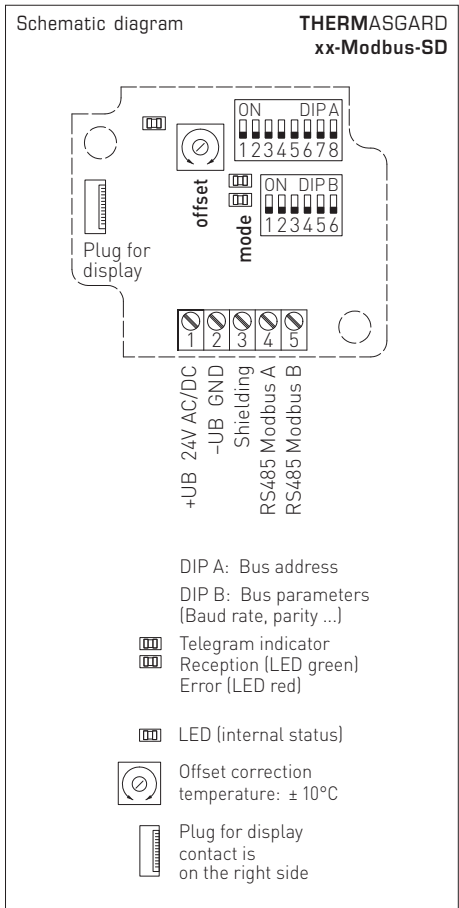
**Modbus sensor SD** with RS485 Modbus interface (not galvanically isolated), selectable bus termination resistance, DIP switch for setting the bus parameters and bus address in current-free state, internal LEDs for telegram status display (illuminated, with customised programming). Uses **internal diagnostics**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

HFTM-Modbus-SD



**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 <b>(Perfect Sensor Protection at IP68)</b>
Measuring range:	-50...+150 °C
Temperature deviation:	typically ±0.2 K at +25 °C
Zero point offset:	±10 °C
Medium:	clean air and non-aggressive, non-combustible gases; liquids depending on selected immersion sleeve (accessory)
Error detection:	sensor breakage, sensor short circuit
Communication:	RS485 interface, <b>not galvanically isolated</b> , Bus termination activatable via DIP switches.
Bus protocol:	Modbus (RTU mode), address range 0... <b>247</b> 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:	sensor sleeve made from stainless steel V4A (1.4571), Ø = 6 mm, nominal length (NL) = 50 mm (optional 30...400 mm)
Sensor cable:	silicone, SiHF, 2x0.25mm²; 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:	<b>cable gland</b> , plastic 2x M12x1.5 (Y-adapter); with strain relief, exchangeable, max. inner diameter 6 mm
electrical connection:	0.14 - 1.5 mm², via terminal screws
Process connection:	by screws
Ambient temperature:	measuring transducer -30...+70 °C
Permissible humidity:	<95 % RH, non-precipitating air
Protection class:	III (according to EN 60 730)
Protection type housing:	<b>IP65</b> (according to EN 60 529) housing tested, TÜV SÜD, Report No. 713139052 (Tyr 1)
Protection type sensor:	<b>IP65</b> (according to EN 60 529) <b>sleeve</b> humidity-tight (standard) <b>IP68</b> (according to EN 60 529) <b>sleeve</b> water-tight (optional) <b>IP54</b> (according to EN 60 529) with <b>glass fibre</b> cable (optional)
Standards:	CE conformity, electromagnetic compatibility according to EMC directive 2014 / 30 / EU, EN 61326
Optional:	<b>display with illumination</b> , two-line, programmable, cutout approx. 36x15 mm (W x H), for displaying the actual temperature, error message or an individually programmable display value
<b>ACCESSORIES</b>	(see table)
<b>THE-xx</b>	<b>immersion sleeve</b> , stainless steel <b>V4A</b> (1.4571) or nickel- plated brass, Ø = 9 mm, inner diameter of socket 5.2 mm, with <b>adjusting screw</b> M12 x1.5

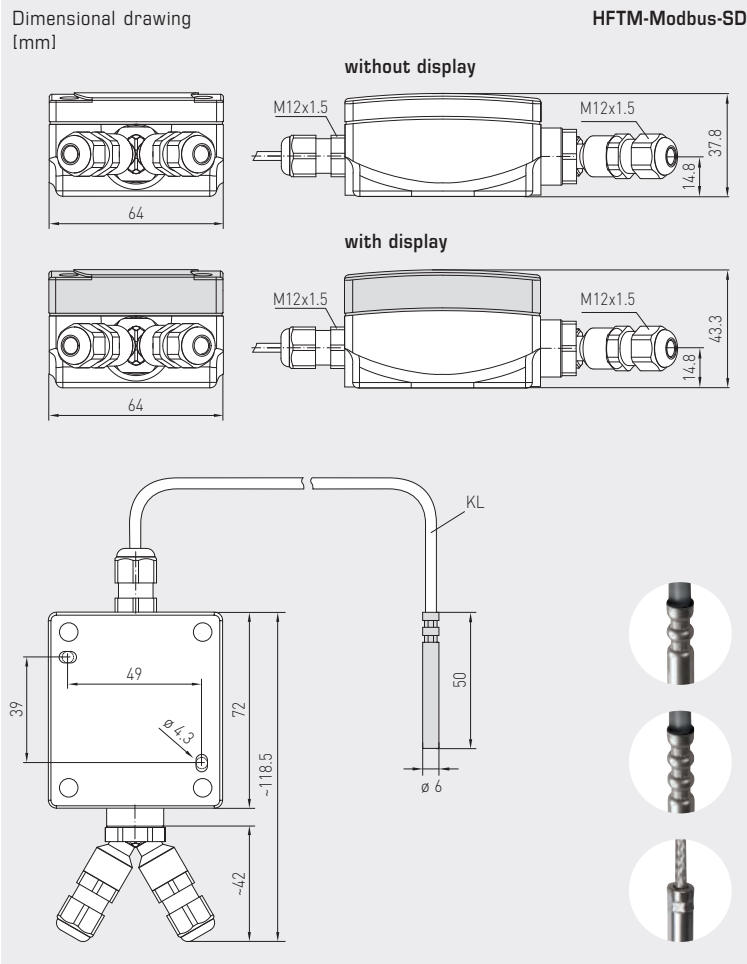




S+S REGELTECHNIK

THERMASGARD® HFTM - Modbus-SD

Sleeve sensor with temperature measuring transducer, calibratable, with Y-adapter, with Modbus connection (not galvanically isolated)



HFTM-Modbus-SD with display



IP 65 (standard)  
humidity-tight stamped

IP 68 (optional)  
watertight compound-filled\*,  
rolled

IP 54 (optional)  
with glass fibre cable

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

**PS-PROTECTION**  
PERFECT SENSOR PROTECTION



THERMASGARD® HFTM - Modbus - SD		Sleeve sensor with temperature measuring transducer with Modbus connection (not galvanically isolated)			
Type / WG01B	Output	Type	Display	Item No.	Price
<b>HFTM - Modbus - SD</b>					
HFTM-Modbus-SD	Modbus	Remote sensor		1101-6266-0210-120	132,56 €
HFTM-Modbus-SD LCD	Modbus	Remote sensor	■	1101-6266-2210-120	185,02 €
Extra charge:	Protection type <b>IP 68</b> (sensor sleeve watertight compound-filled) per running metre of connecting lead ( <b>silicone/PTFE/glass fibre</b> ) other protection sleeve lengths optional			on request on request	3,50 €
<b>ACCESSORIES</b>					
<b>KA2-Modbus</b>	<b>Communication adapter</b> (USB/RS485) for system connection			1906-1200-0000-100	220,41 €
<b>LA-Modbus</b>	<b>Line termination device</b> (with terminating resistor) as an active bus termination			1906-1300-0000-100	82,20 €
<b>THE-xx</b>	<b>Immersion sleeve</b> , stainless steel <b>V4A</b> (1.4571) or nickel-plated brass, Ø = 9 mm, inner diameter of socket 5.2 mm, with <b>adjusting screw</b> M12 x 1.5			see chapter Accessories!	