

# TEMPERATURE SENSORS

SENSOR / ITEM NO.

TA-EXT-RS485-MB / 423.221

TM-RS485-MB / 423.222



## DESCRIPTION OF FUNCTIONS

Temperature sensors for recording ambient and module temperature. The sensors are supplied in sturdy aluminium housings with a robust weatherproof cable. The RS485 interfaces make it particularly suitable for the industrial sector, enabling particularly long lengths of cable.

The following devices are available:

	<i>Ta-ext-RS485-MB</i>	<i>Tm-RS485-MB</i>
Item no.	423.221	423.222
Ambient temperature measurement	✓	-
Module temperature measurement	-	✓
1 x irradiation shield Tamb-Si (optional accessory, item no. 423.056)	✓	-

## TECHNICAL DATA

	<i>Ta-ext-RS485-MB</i>	<i>Tm-RS485-MB</i>
Supply voltage	24 V DC (10...28 V DC)	
Current consumption	typically 25 mA at 24 V DC	
Sensor element	PT 1000 1/3 class B acc. to EN 60751	PT 1000 class A acc. to EN 60751
Sensor cable	Length: 3 m, LiYC11Y, 4 x AWG 26	Length: 3 m, PUR coated, shielded (LiHC11Y, 2 x 0.25 mm <sup>2</sup> )
Measuring range	-40...+90 °C	
Deviation	1 K (condition -40...+90 °C)	

## CONFIGURATION

	<i>Ta-ext-RS485-MB</i>	<i>Tm-RS485-MB</i>
Interface	RS485	
Protocol	Modbus RTU	
Default baud rate	19200 bps	
Selectable baud rates	1200 bps, 2400 bps, 9600 bps, 19200 bps, 38400 bps	
Default address range	81...90 (see type plate)	91...100 (see type plate)
Default data format	8N1	
Selectable data formats	8N1, 8E1, 8O1, 8N2	

Note: Changes to the communication settings can only be made via a USB on an RS485 converter or via the manufacturer's software.

## INSTALLATION

	<i>Ta-ext-RS485-MB</i>	<i>Tm-RS485-MB</i>
Housing	Powder coated aluminium	
Protection class	IP 67	
Operating temperature	-40...+80 °C	
Dimensions (W x H x D)	98 x 34 x 64 mm	
Weight	approx. 530 g	approx. 500 g
Connection cable	Length: 6 m, PUR coated, shielded LiYC11Y, 4 x 0.14 mm <sup>2</sup>	

# IRRADIATION SHIELD TAMB-SI

ITEM NO. 423.056

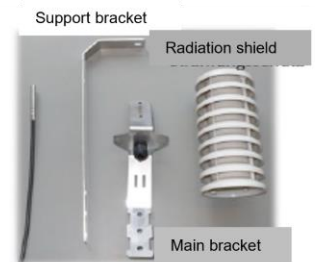
## DESCRIPTION OF FUNCTIONS

Weather and irradiation sensor for ambient temperature sensors with cable sensors. Optional accessory for:

- Ta-ext-RS485-MB

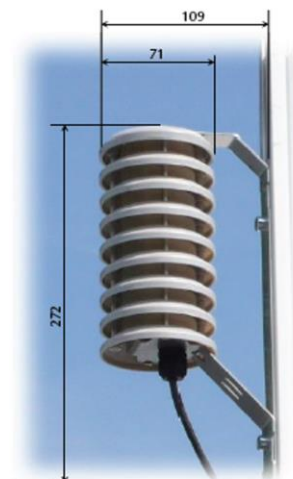
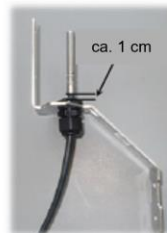
## INSTALLATION

1. Remove the plastic holder on the Tamb-Si sensor.  
CAUTION: Do not damage the cable jacket!



Tamb-Si

2. Install the cable gland in the main bracket.
3. Insert the Tamb-Si sensor in the cable gland. The sensor tube should extend less than 1 cm out of the cable gland.



4. Install the radiation shield on the main bracket and support bracket.



All measurements in mm  
Weight: 270 g

Further information: [www.meteocontrol.com](http://www.meteocontrol.com)