Meteorological probe MP100A / MP400A

Standard meteorology probes with fixed sensors (analog technology).

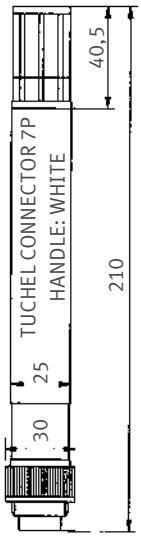
APPLICATIONS

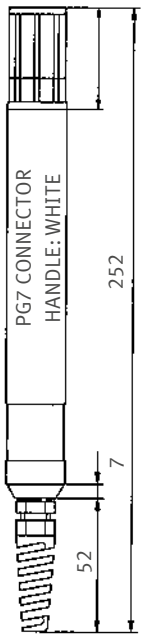
Weather stations, agriculture, ice warning and snow making systems.

FEATURES

- Very robust, therefore high long-term stability
- Voltage and current outputs for humidity and temperature
- HYGROMER® IN-1 Sensor / PT100 1/3 Class B
- Cable length compensation up to 100 m
- Connection with Tuchel T4/T7 connector or fitted cable with open ends

Order code	MP100A	MP400A
Output	Voltage output 0...1 VDC	Current output 0(4)...20 mA
Range of application	-40...85 °C / 0...100 %rh	
Power Supply	15...24 VDC	5...24 VDC
Accuracy at 10...30 °C	10...95 %rh: ±1.5 %rh Remaining range: ±2.5 %rh	
Measurement	Temperature with PT100 - direct or linear output signal	
Filter	Wire mesh filter ~ 20 µm pore size	





Compatible

- Actively ventilated shield — RS12T/24T
- Naturally ventilated shield — AC1002 / AC1003

Delivery package

- Factory adjustment certificate
- Wire mesh filter
- Instruction manual

Recommended accessories

- Humidity standard for calibration 10 %rh — EA10-SCS
- Humidity standard for calibration 35 %rh — EA35-SCS
- Humidity standard for calibration 80 %rh — EA80-SCS
- Wire mesh filter — SP-W3-25

Technical data	MP100A (analog)	MP400A (analog)
General		
Parameters	Humidity and temperature	
Housing material	Polyoxymethylene	
IP protection	IP65	
Weight	120 g	
Supply voltage	4.8…30 VDC	10…30 VDC
Current consumption	<4 mA at 4.8 VDC	<50 mA at 10 VDC
Range of application / Storage conditions	-40…85 °C	
Cable length compensation	Up to 99 m	
Humidity measurement		
Sensor	ROTRONIC HYGROMER® IN-1	
Measurement range	0..100 %rh	
Accuracy at 0…30 °C	10…95 %rh: ±1.5 %rh	
Long-term stability	<1 %rh/year	
Response time	<15 s τ63 (63 % of a jump 35…80 %rh) without filter	
Temperature measurement		
Sensor	PT100 1/3 Class B	
Measurement range	-50…100 °C	
Accuracy at 0…30 °C	±0.3 K	
Response time	<15 s τ63	
Analog output		
Current	N/A	0(4)…20 mA
Voltage	0…1 V	N/A
Digital output		
	N/A	