

Humidity and Temperature Transmitter

For Demanding HVAC and Light Industrial Applications

Overview

MBMet 902 offers highly accurate, fully calibrated and loop powered transmitter series for Atmospheric Air Temperature and Relative Humidity measurement. The transmitter is designed to meet the requirements for various applications in HVAC, Industrial, pharmaceutical and building automation.

MBMet 902 series transmitters are offered in two measurement variants, Ambient Air Temperature and Relative Humidity and Ambient Air Temperature only. For mounting, there are two options, Wall mount and Duct mount. These sensors are mounted in a Polycarbonate Enclosure making them resistant to harsh environment. Two-wire connections allow easy installation directly into air ducts or within a controlled area. Most importantly, the right choice of the filter cap enables usage in harsh environmental conditions.



Benefits and Features:

- Accurate and stable measurements
- Self-loop powered
- Reverse Polarity Protection
- Class-A RTD PT100 sensor used for temperature measurement
- Measuring Range : 0-100% RH and -20°C to +75°C, suitable for many applications
- IP66-rated body
- Each sensor element is individually calibrated
- Available in Wall and Duct mounting versions
- Field replaceable filter – eliminates downtime
- Fast response time

Technical Specifications

Model/Parameter	MBMet – 902A	MBMet – 902B
Input Voltage	10 to 30 VDC	

Relative Humidity

Measuring Range	0-100%RH	-
Output	4-20mA (two wire-Loop Current)	-
Accuracy at 25°C	±2%RH (0 to 90%), ±3%RH (90 to 100%)	-
Hysteresis	±0.8%RH of operating humidity span	-
Repeatability	±0.1%RH	-
Long-term Drift	<0.25%RH/year	-
Response Time at +25°C	8 sec in 1m/s airflow	-

Temperature

Temperature Sensor	PT100 (Class A)
Measuring Range	-20°C to +75°C
Output	4-20mA (two wire-Loop Current)
Accuracy at 25°C	±0.2% of FS

General Specifications

Mounting	Wall / Duct
Wall Mount	80mm (H) × 82mm (W) × 55mm (D)
Duct Mount	80mm (H) × 82mm (W) × 55mm (D) with 180mm Duct mounting arrangements
Cable Gland	PG7
Weight	Wall Mount : 300gm Approx. / Duct Mount : 500gm Approx.
Protection	Reverse voltage and surge

Enclosure

Housing Material	Polycarbonate, Colour RAL 7035, light grey with SS-304 Duct mounting
Impact Resistance	7 Joule
Disruptive Strength	>30 KV/mm
Insulation	Fully Insulated
Surface Resistance	>10 ¹⁵ Ohm, IEC 60093
Toxicity	Halogen free

Environmental

Operating Temperature	-20°C to +75°C
Operating Humidity	0 to 100%RH (non-condensing)

Terminal Details

Terminal Type	Screw Type
Connection	≤2.5 sq. mm, AWG 14
Protection	IP66

Ordering String

Model	Series	Parameter	Type of Mounting	
MBMet				
	902			
		A		Ambient Temperature + Relative Humidity
		B		Ambient Temperature
			W	Wall Mounting
			D	Duct Mounting

For example : MBMet-902-AW

Parameter : Ambient Temperature + Relative Humidity, Wall Mounting

