



Wind Speed and Direction Sensor

OVERVIEW

MBMet 120 series combine Wind Speed and Direction measurements in a single sensing unit. The sensor uses conventional cup and vane technique for measurements. The rotating cup anemometer at the top of the unit provides linear response to wind speed. The vane, which is attached to the body of the unit, provides a fast response to wind direction. The electronics are located inside an anodized aluminum core offering a watertight enclosure for the electronics, providing full protection against water, dust, pollutants, and electromagnetic interferences. It installs in minutes and provides accurate, long-term, continuous monitoring even in harsh weather conditions.

BENEFITS AND FEATURES

- ▶ Combined wind speed and direction sensor at affordable price
- ▶ Low starting threshold
- ▶ Easy maintenance and re-alignment
- ▶ Adapt to harsh weather conditions
- ▶ Low power consumption
- ▶ Fast and linear response to wind

APPLICATIONS

- ▶ Solar and Wind Power Generation
- ▶ Environment Monitoring
- ▶ Automatic Weather Stations
- ▶ Agriculture
- ▶ Smart Cities
- ▶ Marine



MBMet 120 with Pole Mounting Accessories



MBMet 120 series

TECHNICAL DESCRIPTION

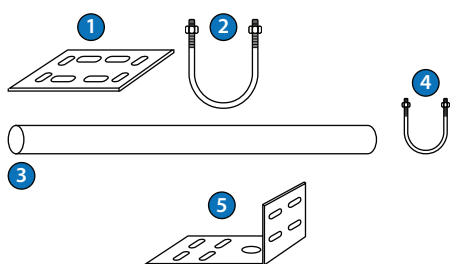
Model/Parameters	MBMet-120A	MBMet-120B
Communication Output	4-20mA	RS-485 Modbus
Wind Speed (Anemometer)		
Measuring Range	0 to 60m/s (0 to 134 mph)	
Accuracy	<10 m/s (22 mph) : ±0.3m/s (0.6 mph) >10 m/s (22 mph) : ±2%	
Resolution	0.2m/s (0.4 mph)	
Wind Direction (Vane)		
Measuring Range	0 to 360°	
Accuracy	±3°	
Resolution	1°	
Measurement Performance		
Starting Threshold	≤0.5m/s (1.1 mph)	
Extreme Wind Speed	70m/s (156.6 mph)	



TECHNICAL DESCRIPTION *(Cont.)*

Model/Parameters	MBMet-120A	MBMet-120B
Electrical Specifications		
Input Voltage	12 to 24VDC	
Power Consumption	80mA @24VDC	
General Specifications		
Operating Temperature	-40°C to +70°C	
Ingress Protection Rating	IP65	
Dimension	Anemometer rotor diameter = Ø180mm Wind vane radius = 270mm Total height = 265mm	
Body Material	Housing : AlMgSi, gray anodized Cups : Polyamide (PA), reinforced with carbon fiber Vane : Polyamide (PA), reinforced with fiberglass	
Weight (packed)	944g (with standard 5 meters cable)	

MOUNTING ACCESSORIES



A) Pole Mounting Accessories

- ① 1 nos. (L) 142mm × (W) 120mm arm mounting plate
- ② 2 nos. 50mm U-clamp
- ③ 1 nos. (L) 900mm GI arm
- ④ 6 nos. 31.75mm U-clamp
- ⑤ 1 nos. (L) 125mm × (W) 110mm × (H) 60mm sensor mounting plate

B) Mounting Accessories

- ④ 4 nos. 31.75mm U-clamp
- ⑤ 1 nos. (L) 125mm × (W) 110mm × (H) 60mm sensor mounting plate

ORDERING STRING

Model	Series	Output	Accessories	Cable Length	
MBMet	120				
		A			4-20mA
		B			RS-485 Modbus
			A		With Pole Mounting Accessories
			B		With Mounting Accessories
			X		No Accessories
				5000	Units : mm (default)
				Units : mm (on request)

For example : MBMet-120B-A5000

Parameter : Wind Speed + Wind Direction

Output : RS-485 Modbus with Pole Mounting Accessories, Cable Length : 5 meters

SEE ALSO

- **MBMet 100** Wind Speed Sensor
- **MBMet 110** Wind Direction Sensor
- **MBMet 140** Ultrasonic Wind Speed & Direction Sensor
- **MBMet 800** PV Module Temperature Sensor
- **MBMet 901** Air Temperature, Humidity & Pressure Sensor
- View our complete range of **Weather Sensors**

****Specifications are subject to change without notice.**

