# 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. It installs in minutes and provides accurate, long-term, continuous monitoring even in harsh conditions. The sensing component is sealed in the waterproof housing shell. The sensor uses a quick connect sensor cable which can be extend to hundreds of meters without affecting the performance MBMet 120 series sensor features low starting, non-blind zone measurement and a long service life.

# **BENEFITS AND FEATURES**

- ► Compact Wind Speed and Direction Sensor
- ► Low starting threshold
- ► Easy maintenance and re-alignment
- ▶ Long field life
- Adapt to harsh weather conditions
- ► Easy Installation
- ▶ Outputs in 4-20mA and RS-485 Modbus

## **APPLICATIONS**

- Solar and Wind Power Generation
- Wind Resource Assessment
- ► Environment Monitoring
- ▶ Bridge and Tunnel
- Automatic Weather Stations
- Agriculture





### **TECHNICAL DESCRIPTION**

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



## **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 : PA, reinforced with					
	carbon fiber, Vane : PA, re	inforced with fiberglass				
Weight (packed)	944g (with standard 5 meters cable)					

## **ORDERING STRING**

Model	Series	Output	Accessories	Cable Length	
MBMet					
	120				
		Α			4-20mA
		В			RS-485 Modbus
			Α		With Pole Mounting Accessories
			Х		Without Pole Mounting 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

M. B. Control & Systems with an experience of 35+ years in the field of electrical automation and instrumentation, in 2017 ventured into turnkey Weather Monitoring Stations. Further, we set up in-house production for high accuracy and reliable weather monitoring sensors under the name "MBMet" series. The MBMet series currently includes Air Temperature, Relative Humidity, Barometric Pressure, Wind Speed, Wind Direction and PV Module Temperature sensors in Digital and Analog Outputs.

#### **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









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