



## Ultrasonic Wind Speed and Direction Sensor

### OVERVIEW

MBMet 140 series offers high precision and stable measurement of Wind Speed and Wind Direction. The MBMet 140 series is an alternative to traditional mechanical cup and vane or propeller and vane anemometers. The sensor design offers lightweight, compact and high-strength structure to with-stand harsh weather conditions. The MBMet 140 series has no moving parts, offering maintenance-free operation in a wide range of applications.



MBMet 140 series

### BENEFITS AND FEATURES

- ▶ Compact Wind Speed & Direction Sensor
- ▶ IP66 Protection Class
- ▶ Low maintenance — no moving parts significantly reduces maintenance cost and time
- ▶ Adapt to harsh weather conditions
- ▶ Starting threshold of 0.1m/s
- ▶ Outputs in 4-20mA, RS-485 Modbus or RS-232 Modbus

### APPLICATIONS

- ▶ Solar and Wind Power Generation
- ▶ Wind Resource Assessment
- ▶ Bridge and Tunnel
- ▶ Automatic Weather Stations
- ▶ Airports and Ports
- ▶ Agriculture

### TECHNICAL DESCRIPTION

Model/Parameters	MBMet-140A	MBMet-140B	MBMet-140C
Communication Output	4-20mA	RS-485 Modbus	RS-232 Modbus
<b>Wind Speed</b>			
Measuring Range	0 to 60m/s		
Accuracy	±2%@ >10m/s		
Resolution	0.01m/s		
<b>Wind Direction</b>			
Measuring Range	0 to 360°		
Accuracy	±3°		
Resolution	1°		
<b>Measurement Performance</b>			
Starting Threshold	0.1m/s		
Extreme Wind Speed	60m/s		
<b>Electrical Specifications</b>			
Input Voltage	12 to 24VDC		
Power Consumption	60mA @ 24VDC		



## TECHNICAL DESCRIPTION *(Cont.)*

Model/Parameters	MBMet-140A	MBMet-140B	MBMet-140C
<b>General Specifications</b>			
Operating Temperature Range	-30°C to +70°C		
Ingress Protection Rating	IP66		
Dimension	145mm × 138mm		
Body Material	Anti-radiation ABS Engineering plastic		
Weight (unpacked)	550g (with standard 5 meters cable)		

## ORDERING STRING

Model	Series	Output	Accessories	Cable Length	
MBMet					
	140				
		A			4-20mA
		B			RS-485 Modbus
		C			RS-232 Modbus
			A		With Pole Mounting Accessories
			X		Without Pole Mounting Accessories
				5000	Units : mm (default)
				.....	Units : mm (on request)

For example : MBMet-140B-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 120** 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.**

