

Wind Speed Sensor

010C

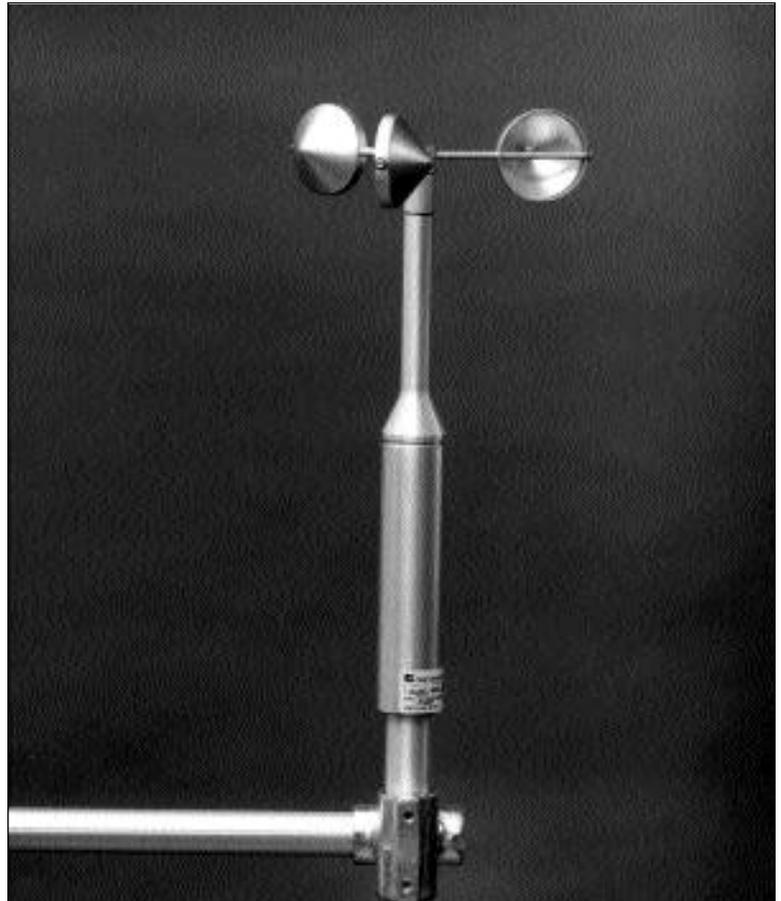
The Model 010C Wind Speed Sensor provides accurate and detailed information on horizontal wind velocity. It is used in virtually all applications where fast response and low starting threshold are of paramount importance. The sensor has a NIST traceable accuracy of $\pm 1\%$ over its entire calibrated range, with a starting threshold of 0.5 mph. The 010C Wind Speed Sensor is presently employed in continuous service in environments ranging from Antarctic cold to arid desert regions.

Features

- Low starting threshold
- Solid state light source and electronics
- Low profile to minimize "Sensor Turbulence"
- Calibrated to NIST secondary standard
- Quick-disconnect connector
- Internal heater for long bearing life

Operation

The lightweight three cup anemometer is directly coupled to a slotted disc chopper wheel. The chopper rotates and interrupts the light path of an optical link. The signal is amplified and produces pulsed frequency output proportional to wind speed. Typically, the pulsed output signal is applied to Met One Instruments' Wind Speed Translator Module for conversion to analog voltage/current output signals.



Accurate, rugged, fast response and low starting threshold—from the Antarctic to desert regions.

The pulsed output signal from the 010C may alternately be used directly with various digital counters, totalizers and other signal processors. Met One Instruments has taken steps to make the 010C functionally more reliable than any other sensor of its kind:

- Built-in electrical field surge protection, which greatly reduces problems associated with static fields, near-miss lightning hits and poor grounding systems.

- Inclusion of Met One Instruments' internal heater (AC use only) which provides positive clean aspiration through the bearings, thereby greatly increasing sensor life.

- An optional, external de-icing heater sleeve may be supplied for those applications where freezing rain, ice and low wind speeds may be encountered.



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Specifications

010C Performance Characteristics

Maximum Operating Range:	0 - 125 mph (0 - 60 m/s)
Starting Speed:	0.5 mph (0.22 m/s)
Calibrated Range:	0 - 100 mph (0-50 m/s)
Accuracy:	±1% (0.15 mph)
Temperature Range:	-50°C to +65°C
Response:	Distant constant less than 5 ft* of flow

* The distance travelled by the air after a sharp edged gust has occurred for the anemometer rate to reach 63% of the new speed.

Electrical Characteristics

Power Requirements:	12 VDC at 10 mA
Output Signal:	11 volt pulse
Output Impedance:	100 ohms maximum

Physical Characteristics

Weight:	1.5 lbs (.68 kg)
Finish:	Anodized Aluminum
Mounting Fixtures:	PN 191 Crossarm Assembly

Accessories

PN 1953 Cable Assembly, vinyl jacketed shielded cable. Specify length in -xx ft.
Aluminum Cup Assembly, distance constant = 15 ft

Subject to change without notice.
