

S-WCG-M003

Ultrasonic Wind Speed and Direction Smart Sensor

Compact and rugged with no moving parts, this ultrasonic sensor is able to measure very low wind speeds, down to 0.4 m/s (compared to 1.0 m/s for our mechanical sensors). As with all Onset Smart Sensors, this sensor is plug-and-play with HOBO stations (RX3000, RX2100, USB Micro Station, H22, and the U30-NRC). Because it is automatically recognized by HOBO stations, there is no need for programming, resulting in fast and easy deployment. The sensor is powered by its own built-in solar panel.


Interested in wireless sensors? The wireless Wind Speed and Direction sensor is available for use with the HOBOnet Field Monitoring System.

Key Advantages:

- Compact and rugged with no moving parts
- Plug-and-play with HOBO stations
- No starting threshold – suitable for low wind speeds
- No wind direction dead band – accurate wind data in all directions
- Powered by its own built-in solar panel
- Affordably priced



HOBO S-WCG-M003 Sensor Specifications

	Wind Speed/Gust	Wind Direction
Measurement Range	0 to 41.16 m/s (0 to 92.07 mph)	0 to 359 degrees
Accuracy	±0.8 m/s (1.79 mph) or ±4% of reading, whichever is greater	0.2 to 3 m/s (0.44–6.7 mph): ±4 degrees >3 m/s (6.7 mph): ±2 degrees
Resolution	0.4 m/s (0.89 mph)	1 degrees (0 to 359 degrees)
Measurement Definition	Wind speed readings are taken every three seconds for the duration of the logging interval Wind speed: Average speed for the entire logging interval Gust speed: The highest three-second wind recorded during the logging interval See <i>Measurement Operation</i> .	Unit vector averaging used; vector components for each wind measurement are calculated every three seconds for duration of logging interval (see <i>Measurement Operation</i>)
Operating Temperature Range Without Icing	-15°C to 55°C (5°F to 131°F)	
Environmental Rating	Weatherproof	
Housing	Polyacetal	
Dimensions	Sensor length: 380 mm (14.96 inches) Sensor head diameter: 60 mm (2.36 inches) Sensor rod diameter: 16 mm (0.63 inches)	
Weight	200 g (7 oz)	
Power Supply	Photovoltaic panel, LIFEP04 3.2 V -600 mAh battery	
Bits per Sample	8 for each channel, 24 total	
Number of Data Channels*	3	
Measurement Averaging Option	Automatic averaging (see <i>Measurement Operation</i>)	
Cable Length Available	3 m (9.8 ft)	
Length of Smart Sensor Network Cable*	0.5 m (1.6 ft)	
	The CE Marking identifies this product as complying with all relevant directives in the European Union (EU).	

* A single HOBO station can accommodate 15 data channels and up to 100 m (328 ft) of smart sensor cable (the digital communications portion of the sensor cables).

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