ONSET®

S-WCG-M003 Sensor

Ultrasonic Wind Speed and Direction Smart Sensor

The Ultrasonic Wind Speed and Direction Smart Sensor is compact and rugged with no moving parts. Because this sensor is ultrasonic it 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, 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.

Supported Measurements:

Wind

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

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 *Measurement Operation*.	Unit vector averaging used; vector components for each wind measurement are calculated every three seconds for duration of logging interval (see *Measurement Operation*)
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 *Measurement Operation*)	
Cable Length Available	3 m (9.8 ft)	
Length of Smart Sensor Network Cable*	0.5 m (1.6 ft)	
CE	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).

Contact Us

Sales (8am to 5pm ET, Monday through Friday)
▶ Email sales@onsetcomp.com
▶ Call 1-508-759-9500
▶ In U.S. toll free 1-800-564-4377
▶ Fax 1-508-759-9100

Technical Support (8am to 8pm ET, Monday through Friday)
▶ Contact Product Support www.onsetcomp.com/support/contact
▶ Call 1-508-759-9500
▶ In U.S. toll free 1-877-564-4377

Onset Computer Corporation
470 MacArthur Boulevard
Bourne, MA 02532

METRICS

Metrics GmbH • Elberfelder Str. 19-21 • 58095 Hagen
Telefon: 02331 3483086 • Telefax: 02331 3483088
E-Mail: info@metrics24.de • https://www.metrics24.de