

## Measurement, Control, and Datalogging Solutions



## S-WDA-M003 Wind Direction Smart Sensor

The Wind Direction Smart Sensor is a research-grade plug-and-play sensor for measuring and logging wind data. It provides average wind direction for the measurement interval. This highly-durable wind vane has a drip overhang for anti-icing. Its shielded stainless-steel ball bearings and static-dissipating housing provide a long sensor long life. The sensor calculates a unit vector average of the wind direction, providing data directly in degrees. The M-CAA Full Crossarm is recommended for mounting. The S-WSA-M003 Wind Speed Smart Sensor may also be required.

	1
Measurement Range	0 to 355 degrees, 5 degree dead band
Max Wind Speed	60 m/sec (134 mph)
Accuracy / Resolution	± 5 degrees / 1.4 degrees
Starting Threshold	1.0 m/s (2.2 mph)
Measurement Definition	Unit vector components of wind direction are accumulated every three seconds for duration of logging interval. Average direction is calculated from the average of these.
Operating Temp. Range	-40°C to +70°C
Service Life	4 to 6 years typical depending upon environmental conditions
Housing	Injection-molded housing and vane, static dissipating base, lead-free silicon bronze nose, and aluminum mounting rod.
Bearing Type	two shielded stainless steel ball bearings
Turning Radius	Approximately 13.5 cm
Dimensions	46 x 20 cm including 1.27 cm diameter mounting rod, 2.5 mm drip overhang
Weight	Approximately 370 g
No. of Data Channels	1
Measurement Averaging Option	Automatic averaging (see Measurement Definition)
Cable Length Available	3.5 m, Length of Smart Sensor Network Cable: 0.5m
CE	Complies with all relevant directives in the European Union (EU)

Order Information	Part No
Wind Direction Smart Sensor	S-WDA-M003
Wind Speed Smart Sensor	S-WSA-M003
S-WSA-M003 and S-WDA-M003 (Set for single package ordering)	S-WSET-A
Full Crossarm	M-CAA



Tempcon Instrumentation Ltd. Unit 19, Ford Lane Business Park, Ford Lane Ford, Nr. Arundel, West Sussex. BN18 0UZ Tel: ++44 (0) 1243 558270 Fax: ++44 (0) 1243 558288 Email: info@tempcon.co.uk Web site: www.tempcon.co.uk