

WINDCRANE™ S20

Wind Speed Sensor



Anemometer for WINDCRANE wind monitoring system

Technical Specification

The S20 anemometer is a rugged, high-accuracy wind speed sensor for use with the WINDCRANE wind monitoring system. It is easy to install and provides reliable, accurate wind readings. The sensor is typically supplied with a MEASNET calibration certificate.

The sensor is supplied with mounting hardware (mount tube and clamp) for easy installation on a tubular pole or stub mast.

Connection to the WINDCRANE logger unit is via tough, abrasion-resistant shielded cable with rugged weatherproof M12 industrial connectors.



Mechanical

Materials	Lexan/polycarbonate rotor and ABS body, PVC weather boot, black colour. Low-friction self-lubricating bearings.
Dimensions	Sensor height 130 mm, rotor diameter 190 mm Mount tube + sensor height 300 mm approx
Mounting	Integral mounting tube, 250 mm length, 12.7 mm dia. Clamp bracket to suit mounting onto 25-50 mm (1-2 inch) diameter tubular pole.
Working temperature	-40 °C to +60 °C (non-icing)
Weight	0.6 kg incl. fixings and cable



Electrical / Measurement

Sensor	Tacho generator with rotating magnet.
Measurement range	0.75 - 50 m/s (3-180 km/h, 2-112 mph) (survival 90 m/s, 320 km/h, 200 mph)
Accuracy	1% nominal, ± 0.1 m/s (5-25 m/s) or 1 km/h (3-15 km/h), consensus standard (MEASNET calibrated version also available)
Power	Passive sensor, no power required
Connection	M12 4-pole male connector on pre-wired 1.5 m pigtail. Logger connection via M12 cable supplied separately. Pin 1 = Output signal (sine-wave voltage to GND) Pin 2 = GND Knurl/Thread = Cable screen
Output Signal	Sine wave, 0.2-12 V peak-peak, 0-125 Hz Frequency linearly proportional to wind speed Speed m/s = 0.76 x Hz nominal (conversion from frequency signal to wind speed units is handled by WINDCRANE system)

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