

WS-05305 Wind Monitor-AQ

Air Quality Sensor

The model WS-05305 Wind Monitor-AQ has been designed specifically as a high resolution wind sensor for air quality measurements.

The sensor is based on the very successful Wind Monitor (model WS-05301) with the same attention to materials and reliability that characterise the R.M.Young products.

The sensor include a junction box and mounting for a standard 34mm pipe.



SPECIFICATIONS:

Range:

Speed: 0-40m/s (144 km/hour)
gust survival 45m/s (162 km/hour)
Direction: mechanical: 360°
electrical: 355°

Accuracy:

Speed: 0.2m/s (0.7 km/hr)
Direction: $\pm 3^\circ$

Threshold:

Speed: 0.4m/s (1.4 km/hr)
Direction: 0.5m/s (1.8 km/hr) at 10°

Dynamic Response:

Speed: Propeller distance constant - 2.1m.
Direction: Vane delay distance - 1.2m.
Damping ratio: 0.45

Signal Output:

Speed: AC sine wave, 3 pulse/rev.
1800 rpm (90Hz) = 8.8 m/s (31. km/hr)
Direction: Analog DC voltage from 10K Ω conductive plastic potentiometer with DC excitation

Output signals also available as 4-20mA or 0-1VDC analog outputs. 0-5VDC output is available as an option.

Power Requirements:

WS-05305 15V DC maximum pot. excitation
WS-05305L 8-30V DC (40mA max.)
WS-05305V 8-24V DC (5mA at 12V DC)

ORDERING INFORMATION:

Model	Description
WS-05305	Wind Monitor-AQ sensor for Air Quality measurements Speed output is an AC frequency and the vane output is from a 10K Ω potentiometer
WS-05305L*	Wind Monitor-AQ sensor for Air Quality measurement Outputs are 4-20mA DC full scale
WS-05305V*	Wind Monitor-AQ sensor for Air Quality measurement Outputs are 0-1V DC full scale 0-5V DC optional

* Specify suffix for desired wind speed scale:

0-50 m/s	Add suffix "M"
0-100 mph	Add suffix "P"
0-100 knots	Add suffix "N"
0-200 km/hr	Add suffix "K"

For example: WS-05305LM specifies a sensor with 4-20mA output scaled for 0-50 m/s.