

Propeller Anemometer

Features

- Precision wind speed measurement
- Tach-generator output
- Optional photochopper transducer
single or dual direction available

Description

The Model WS-27106 Propeller Anemometer is a precision air speed measuring instrument.

The four blade helicoid propeller drives a miniature tach-generator. Output voltage is directly proportional to the axial component of the wind speed. Signal polarity indicates direction of propeller rotation.

The WS-27106 Propeller Anemometer is also available with single or dual direction photochopper transducer.

The WS-27106 Propeller Anemometer is especially suited for measuring the vertical wind component.

Signal Output

Standard Tach-Generator

Analog DC voltage proportional to wind component
Polarity indicates direction
1800RPM (500mV) = 8.8m/s (22kph)

Optional Photochopper transducer

Voltage pulse with frequency proportional to wind component
10 pulses per revolution
1800RPM (300Hz) = 8.8m/s (22kph)



Specifications

WS-27106 with WS-08274

expanded polystyrene (EPS) propeller (standard)

Range	0 to 25m/s (0 to 90kph)
Threshold	0.3m/s
Distance Constant	1.0m
Propeller diameter	22cm
Propeller Pitch	29.4cm wind passage per revolution

WS-27106 with WS-08254

carbon fibre thermoplastic propeller (CFT)

Range	0 to 35m/s (0 to 125kph)
Threshold	0.4m/s
Distance Constant	2.1m
Propeller diameter	20cm
Propeller Pitch	30.0cm wind passage per revolution

General Specifications

Power requirements	Tach-generator model self powered Photochopper models require 5-15VDC (11mA)
Dimensions	Overall length = 43cm, housing dia = 2.5cm, mounts on 3/4" pipe
Weight	0.5kg (shipping 1.8kg)

Order Codes

Model	Signal Output
WS-27106	Tach-Generator
WS-27106D	Single direction photochopper
WS-27106F	Dual direction photochopper
For WS-08254 CFT propeller	add "T" to model number

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