Close to 100 years
Since 1925

SIAP+MICROS
Environmental Monitoring Solutions

ULTRASONIC ANEMOMETER

WINSON-4

- High accuracy
- Reduced wing profile
- Electronic compass system

Description

WINSON-4 is an ultrasonic anemometer for the measurement of wind speed and wind direction. The sensor exploits the principle for which the acoustic waves, along their path, are influenced by the movements of the air they pass through. The sensing element is composed of 2 pairs of transducers-receivers along two orthogonal axes in order to detect both wind speed and wind direction on the horizontal plane.
WINSON-4 is characterized by a high sensitivity for detecting very low speeds which are not detectable by traditional methods. This feature allows to set the starting threshold even below 0.5 m/s.
The sensor is also equipped with with a magnetic compass for applications on mobile stations.
WINSON-4 is supplied with power and signal cable (12m).

Main feautures

- **High accuracy**
- **Reduced wing profile**
- **Diagnostic system for reporting measurement errors**

Technical Specifications*

Measurement Performance	
Wind speed [m/s]	
Measurement range	0 ÷ 60
Resolution	0.01 m/s
Accuracy	max ± 0.2 m/s or ± 2% (at range 0 ÷ 35 m/s) / ± 2% (> 35 m/s)
Response time	≤0.5 s
Wind direction [°]	
Measurement range	0 ÷ 360
Resolution	0.1
Accuracy	±2
Response time	≤1 s
Operating conditions	
Temperature	-40°C ÷ +60°C
Humidity	0% ÷ 100%
Outputs	
RS485 Modbus	Wind speed, wind direction
Power supply and consumption	
Voltage supply	10 ÷ 30 Vdc
Power supply	26 mA @ 12 Vdc
Mechanical specifications	
Materials	ASA and AISI 316 Stainless Steel
Level of protection	IP66
Weight	640 g
Dimensions	Ø = 150 mm; Height: = 180 mm
Installation mast size (diameter)	External $Ø_{MAX}$ = 40 mm, Internal $Ø_{MIN}$ = 36 mm
Electrical connections	23 pole male connector
Ordering codes	
RS485-Modbus	PSM-t035a-WINSON-4

*Changes on technical performances can be applied upon request of specific calibration

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