ANEMOMETER

USER MANUAL

GENERAL DESCRIPTION

The Anemometer is a device primary designed to accurately measure the wind speed and make it available to the user in the best suitable way for its applications.

It's mainly intended, but not limited, to be used in wind energy applications for preliminary studies, for commissioning testing and for continuous performance checking and monitoring.

It's equipped with an additional temperature sensor that give the working temperature of cup anemometer.

FEATURES

Inputs:

wind speed:	0 ÷ 50 m/s (0 ÷ 180 km/h)

Outputs:

pulse:	2 pulses per revolution, close to 1,4m/s. (← approximate; see calibration value) Max current per pulse NPN 25mA (pull down)

Measurements precision:

resolution:	0.227 km/h
accuracy:	< ± 3,9%
starting velocity	> 0.5m/s

Supply:	9 ÷ 30 Vdc
Case:	anodized aluminium with screws to fix it on one end of a pole
Wiring:	300 cm cable, UV resistant
Connectors:	optional M8 4 pin, IP67 degree, UV resistant
Dimensions:	rotor diameter : Ø 166mm body diameter: Ø 44 ext., Ø 36 int. mm height: 223 mm
Operating temperature:	-30°C ÷ +70 °C (transport and storage -35°C ÷ +70 °C)

Every Anemometer is factory calibrated.

PIECE'S LIST

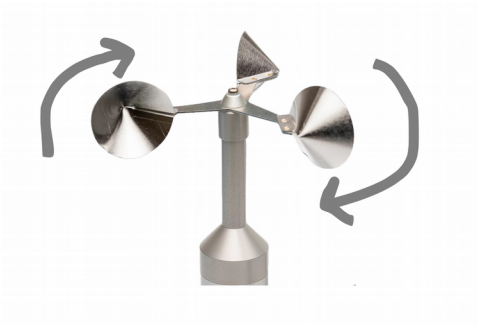
- anemometer with screws for end pole positioning
- instruction manual
- calibration report
- transportation box

Important : Do not try to open the case of Anemometer: warranty will be void.

ASSEMBLY

Anemometer is provided with screws to be applied in end pole of a 12 - 35mm diameter. For applications in other locations (i.e. in a arm) it is necessary a mounting bracket

Note: it is recommended to mount anemometer cups in order to have clockwise rotation (top view).



CONNECTIONS

#	Name	Description	Cable colors
1	SUPPLY +VIN	power supply input, 9-30 Vdc	Red
2	GND	power supply ground reference and for output signals	Black
3		Not used	
4		Not used	
5		Not used	
6		Not used	
7	Signal	NPN open collector output signal	Yellow
8		Not used	

Tab. 1

Female connector back view with connection scheme

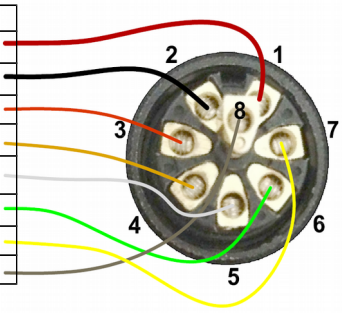


Fig.1

CALIBRATION

This Anemometer can be calibrated in MEASNET laboratory. However, if calibration is made by our factory, we have developed wind conditions and procedure able to give correction parameter hand-written on page 1

NOTE

Every Sunmeter and Anemometer is configured with a constant value (K) equal to 0.6804.
In the case of a product replacement request, kindly inform us in prior if the Sunmeter or Anemometer have a different value of K instead of the standard value mentioned above.
For replacement requests, please contact our support team

CONTACTS

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