



kintech
engineering



DATASHEET

K360V

WIND VANE

The wind vane is designed for use in wind resource assessment and is built from high strength anodized aluminium.

The K360V sensor is a high precision wind vane with no dead band, a resolution of just 0.35° and accuracy of $\pm 1.4^\circ$.

K360V | WIND VANE

DESCRIPTION

The K360V sensor is a high precision wind vane with continuous 360° rotation and no dead band and a resolution of just 0.35°. Repeatability is a key factor in the production process of a wind vane meant to be used in wind resource assessment. The K360V wind vane has such a high repeatability that no individual calibration is required for each individual wind vane which means that data logger settings can be left with the factory slope and offset. The wind vane is designed for use in wind resource assessment, solar resource assessment as well as meteorology and environmental monitoring.

The K360V wind vane features a very low starting threshold of less than 0.4 m/s, an accuracy of +/- 1.4° and is built from high strength anodized aluminium and stainless steel. The wind vane is designed for mounting on a 25 mm (or 1") diameter tube.

Optional two per box packages to reduce the transpost costs.

Main characteristics:

- No dead band
- High accuracy of +/- 1.4°
- High resolution of 0.35°
- High quality materials
- Threshold < 0.4 m/s
- High manufacturing repeatability

APPLICATIONS

Wind resource assessment, solar resource assessment as well as meteorology and environmental monitoring.

FEATURES

Electrical characteristics

Sensor type	Tunnel Magneto Resistance
Output signal	Analog
Output range	0...5 V (0...360°)
Supply voltage	6...22 V
Power consumption	< 0.75 mA
Dead band	None
Resolution	0.35°
Accuracy	+/- 1.4°
Miswire protection	Temperature fuse

Response characteristics

Starting threshold	< 0.4 m/s according to ASTM standards D5366-96
Delay distance	< 1.7 m/s

Sensor compatibility

Compatible with	Orbit 360, EOL Zenith, all NRG loggers, Ammonit, Campbell
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Operating range

Measurement range	0 - 360°
Temperature	-40...+60 °C
Humidity	0...100 % RH
Survival speed	60 m/s

K360V | WIND VANE

Physical dimensions

Weight	0.250 kg
Height	265 mm
Body diameter	39.5 mm
Rotor diameter	330 mm

Materials

Wing	Anodized aluminium
Body	Corrosion resistant anodized aluminium
Bearing	Highly resistant ball bearings

Installation



Mounting	Onto a 25 mm tube
Connection	4 pin aviation plug
Cable recommendation	Signal cable 4x0.5 mm ² + shield
Tools required	3 mm allen wrench, electrical tape

Note 1: Male to Female Aviation Connector Socket.

SENSOR WIRING TABLE

Sensor Model	Sensor Pin		Kintech Colors		Orbit 360			EOL Zenith	
					Section	Terminal	Type	Section	Terminal
	1	REF		Yellow	Analog Channels		(-)	DIR	
	2	SIG		White	Analog Channels		Signal	DIR	
	3	Us (+)		Green	Analog Channels		* (+)	BAT	
	4	GND		Brown	Analog Channels		(-)	BAT	
		Shield		Yellow-Green	Power Input				BAT

Note2: Base sensor view / Soldering connector view.

* (+) = Bat+ with current limited (12mA). Only 1 sensor must be powered.

HOW TO CONFIGURE IN ATLAS

Open Atlas and go to the data logger you are working on. Scroll to the “channels” section and select the following type and model:

- Group: Analog channels
- Sensor Type: Windvane
- Sensor Model : **OUTPUT 0-5V: THIES TMR / K360V**

HOW TO CONFIGURE IN EOL MANAGER

Open EOL Manager and go to the data logger you are working on. Open the “inputs” tab and select the following type and model:

- Group: Wind Vanes / Analog Inputs
- Type: Windvane
- Model: **Output 0-5V**

Last modified: 04.12.2019

For more information please contact support@kintech-engineering.com or visit our website www.kintech-engineering.com