



# 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 +/- 1.4°.

# 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:**

High accuracy of +/- 1.4°

No dead band

- High resolution of 0.35°
- High quality materials
- Threshold < 0.4 m/s</li>
- High manufacturing repeatability

#### **APPLICATIONS**

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

#### **FEATURES**

# **Electrical characteristics**

Output signal	Analog
Output range	0-5 volts (0-360°)
Supply voltage	6 - 22 volts
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
r i r i r i r i r i r i r i r i r i r i	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

# **Operating range**

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

Last modified: 29.08.2019



# **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 25mm tube
Connection	4 pin aviation plug
Cable recommendation	Signal cable 4x0.5 mm2 + shield
Tools required	3 mm allen wrench, electrical tape

**Note 1:** Male to Female Aviation Connector Socket.

# **SENSOR WIRING TABLE**

Canaay Madal	ensor Model Sensor Pin		Kintech Colors		Orbit 360			EOL Zenith	
Sensor Model					Section	Input	Symbol	Section	Symbol
	1	REF		Yellow	Analog Channels	Nº 47	(-)	DIR 1	(-)
	2	SIG	$\circ$	White	Analog Channels	Nº 48	ANL 1	DIR 1	SIG 1
	3	Us (+)		Green	Analog Channels	Nº 49	*(+)	BAT	(+)
(1) (a)	4	GND		Brown	Analog Channels	Nº 47	(-)	BAT	(-)
(23)		Shield	•	Yellow-Green	Power Input	=	<u>_</u>	BAT	<u></u>

**Note 2:** Base sensor view / Soldering connector view.

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

Example of channels on data loggers.

# **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: 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: Ouput 0-5V

Last modified: 29.08.2019

