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DATASHEET

K620A

CUP ANEMOMETER

The K620A model is a high quality cup anemometer with aluminium body manufactured in the European Union.

The anemometer provides a low level AC sine wave and frequency linearly proportional to the wind speed.

K620A | CUP ANEMOMETER

DESCRIPTION

The K620A is our latest cost-effective cup anemometer offering exceptional data quality as well as precision. With our 20-year experience in the design and manufacturing of instrumentation for both wind & solar resource assessment the launch of the K620A is yet another step in our efforts to provide a comprehensive portfolio of high-quality instruments for our customers.

The body is made of high quality anodized aluminium and the cups are made of resistant polycarbonate and supplied with a factory calibration with wind speeds between 4-16 m/s in accordance with Measnet recommendations. The anemometer can be supplied with a Measnet calibration.

APPLICATIONS

Wind resource assessment, solar resource assessment, solar monitoring, meteorology, enviromental monitoring.

FEATURES

Electrical characteristics	
Output signal	Low level AC sine wave, frequency linearly proportional to wind speed

Sensor compatibility	
Compatible with	Orbit 360, EOL Zenith, all NRG loggers, Ammonit, Campbell

Transfer function	
Equation	V(m/s) = 0.62 * f (Hz) + 0.26
Linearity (typical error)	< 0.025 m/s
Regression coefficient (r)	0.99999
Starting threshold	< 0.3 m/s
Distance delay	1.7 m
Uncertainty	@10 m/s 0.10 m/s @16 m/s 0.16 m/s

Operating range	
Sensor range	0.3...60 m/s
Temperature	-50...+60 ºC
Humidity	0...100 % RH

Physical dimensions	
Weight	0.185 kg
Height	207 mm
Body diameter	39.5 mm
Rotor diameter	156 mm

Materials	
Cups	Injection molded polycarbonate
Body	Corrosion resistant anodized aluminium
Bearing	Highly resistant ball bearings

Note: *Values obtained following the ASTM D 5096-02 standard.*

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

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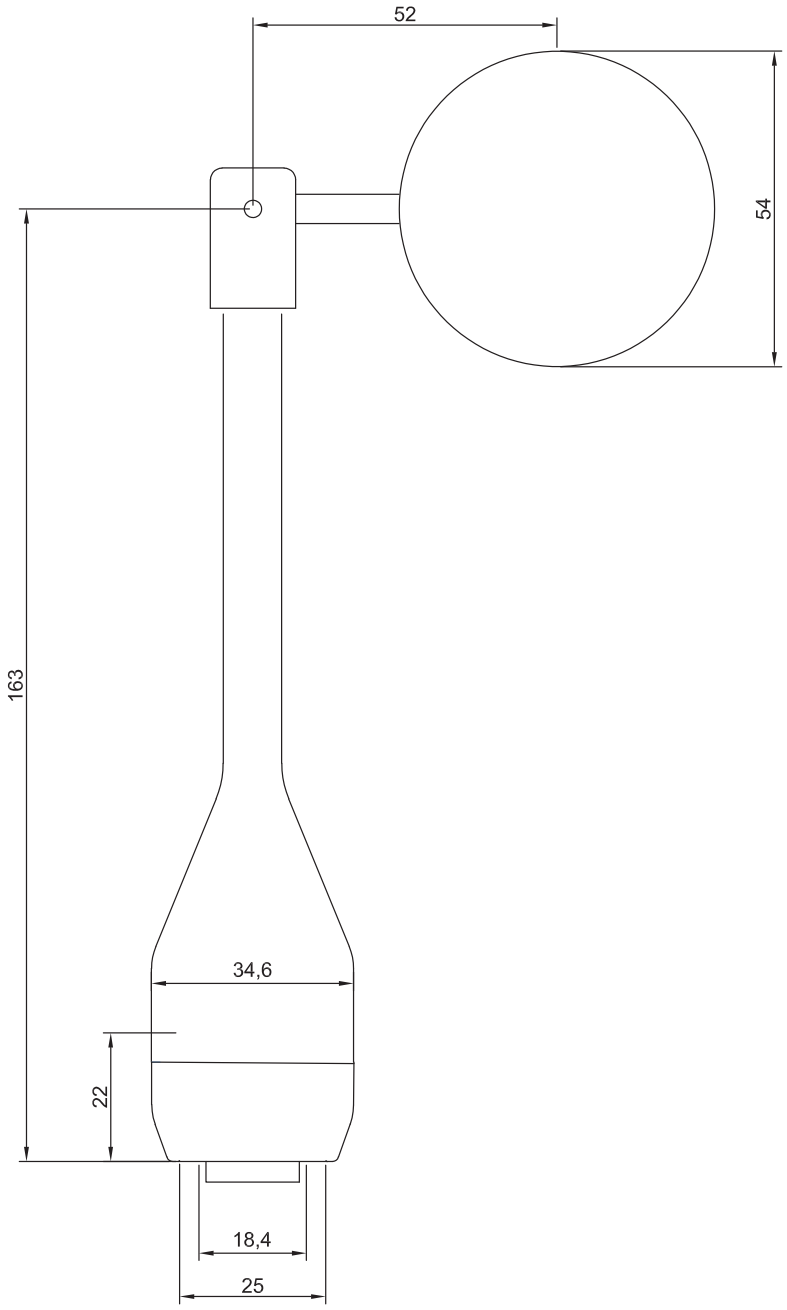
Installation

Mounting	Onto a 25mm tube
Connection	4 pin aviation plug
Cable recommendation	Signal cable 2x0.5 mm2 + shield
Tools required	3 mm allen wrench, electrical tape

Note: *Male to Female Aviation Connector Socket.*

SENSOR DIMENSIONS



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CABLE RECOMMENDATION

Signal cable up to 150m: **2x0.5 mm² + shield**. For longer cable, please consult sensor manufacturer.

SENSOR WIRING TABLE

Sensor Model	Sensor Pin		Kintech Cable Colors		Orbit 360			EOL Zenith	
					Section	Terminal	Type	Section	Terminal
  *Base sensor view / Soldering connector view.*	1	N/A							
	2	Signal		White	Frequency Channels	2 5 8 11 14 17 20 23 26 29	Signal	Anemometer Inputs	1 2 3 4 5 6 7 8 9 10
	3	N/A							
	4	Reference		Brown	Frequency Channels	1 4 7 10 13 16 19 22 25 28	(-)	Anemometer Inputs	– –
	Shield			Yellow Green	Power Input	⏚		BAT	⏚

REQUIRED DATA LOGGER VERSION

Minimum data logger required: **ORBIT 360 BASIC PLUS**.
Minimum **firmware** required: **2.09**

HOW TO CONFIGURE IN ATLAS

Start Atlas and open the data logger you are working on. Now go to *Site settings* and scroll down to the *Channels* section and select the following type and model:

- Group: Frequency channels
- Sensor Type: Anemometer
- Sensor Model: **K620A / Ornytion 107 /P2546C**

Important! Please make sure you are working with the latest version of Atlas. To check for new updates click the *Check for updates* button in the left-hand menu located in the main dashboard.

HOW TO CONFIGURE THIS SENSOR ON SITE

We recommend performing the entire sensor configuration using Atlas at the office before installing sensors onsite. Once the sensor is correctly setup in Atlas, use the *Upload settings* tool, to upload the sensor configuration to the data logger.
In case you are already on site and need to configure the sensor directly on the data logger, follow these steps:

1. Turn on the data logger.
2. Using the keypad on the data logger, navigate the menu until you see *Sensor model*, then click the "right arrow" on the keypad.
3. Now scroll down to the channel you are going to connect the sensor to, and click the "right arrow" on the keypad.
4. Now click "Set" on the keypad and scroll up in the menu to set the sensor model type according to the table here below. Once you have found the correct sensor model, click the "right arrow" key twice to select it and save.
5. Click the "left arrow" several times to go back to the main menu.

Data logger model	Firmware version	Sensor model type on data logger		
		Magnitude	Number	Name
ORBIT 360	≥ 2.25	Wind speed	07	K620A/P2546C/107
	< 2.25	Wind speed	07	K620A/Ornytion 107
	< 2.09	Wind speed	07	ORNYTION 107
EOL ZENITH	any	Wind speed	07	ORNYTION_107

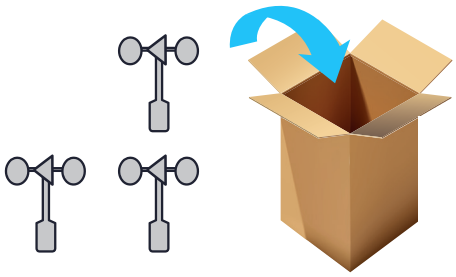
HOW TO CONFIGURE IN EOL MANAGER

Open EOL Manager and go to *Settings* of the data logger you are working on. Open the *Inputs* tab and select the following type and model:

- Group: Anemometers/Frequency
- Sensor Type: Anemometer
- Sensor Model: **ORNYTION 107**

PACKAGING

Robust cardboard box protecting the cup anemometers with optional three-per-box. Ensures safe and cost-effective transportation.



Last modified: 10.12.2021