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K611PB
Pressure sensor

Range: 600 - 1100 mb / Supply: 3.3 - 30 VDC

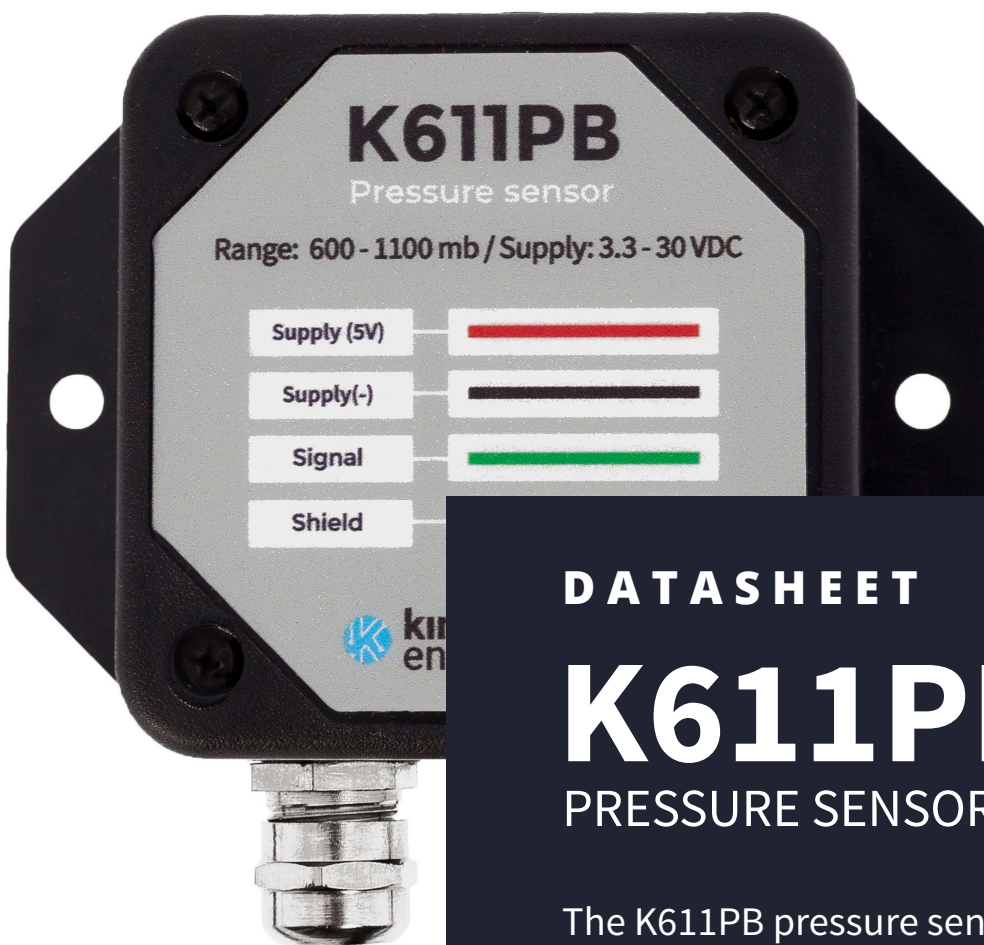| Supply (5V) | |
Supply(-)	
Signal	
Shield	

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K611PB
PRESSURE SENSOR

The K611PB pressure sensor is a robust compact sensor specifically designed to meet the requirements in meteorological and wind resource assessment applications.

K611PB | PRESSURE SENSOR

DESCRIPTION

The K611PB pressure sensor is a robust compact sensor specifically designed to meet the requirements in meteorological as well as wind and solar resource assessment applications.

The sensor offers high performance, easy installation and frequency output allowing the use of longer cables without any signal loss. A great advantage for wind resource assessment, where pressure sensors are regularly installed at 80 m to 150 meters.

The K611PB is accurate and stable with a long term stability of less than ±1.0 mbar (specified in the full operating pressure range 0…+85 ºC).

Main features and advantages of the K611P-B pressure sensor:

- Low energy consumption (1.8mA)
- Wide power supply range (3.3...30V)
- Output range 600...1100mb*
- Frequency output**
- Competitive pricing

  * Can be installed at any altitude above sea level

  ** Because of the type of output signal, it is not necessary to increase the sensor cable cross section for installations at heights (with the consequent savings in cable).

APPLICATIONS

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

FEATURES

Technical Data

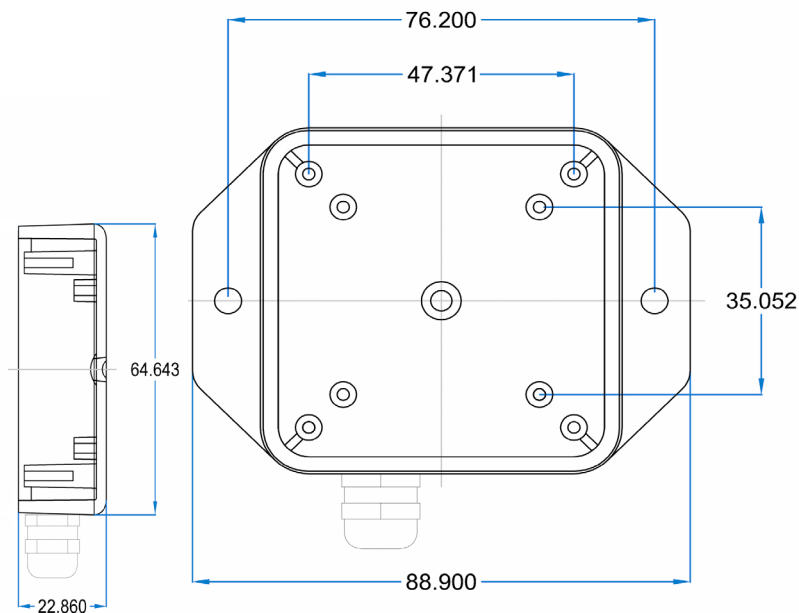|	
Pressure range	600…1100 mbar
Frequency range	1... 500 Hz (effective pressure range: 601… 1100 mbar)
Low noise	0.05 mbar in standard mode
Overpressure	10000 mbar
Accuracy pressure	±0.52 mbar
Long term stability	±1.0 mbar, 12 months (specified in the full range operating pressure range)
Supply voltage	3.3…30 VDC
Input current	1.8 mA
Operating temperature	-40…+85 ºC
Storage temperature	-40…+85 ºC
Weight	94 g with cable 70 cm long

The barometric pressure, in mbar, can be calculated from the measured Hertz according to the following equation:
Pressure = slope*Hz + offset = 1*Hz + 600

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

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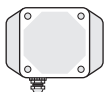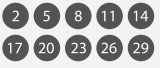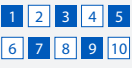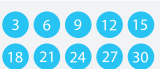
SENSOR DIMENSIONS

CABLE RECOMMENDATION

Signal cable up to 150m: **3x0.5 mm² + shield**. For longer cable, please consult sensor manufacturer.

SENSOR WIRING TABLE

Sensor Model	Sensor Pin	Kintech Cable Colors				Orbit 360			EOL Zenith	
		Cable directly from sensor		Cable extension		Section	Terminal	Type	Section	Terminal
	Signal	🟢	Green	⚪	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
	Supply (-)	⚫	Black	🟤	Brown	Frequency Channels	1 4 7 10 13 16 19 22 25 28	(-)	Anemometer Inputs	− −
	Supply (+)	🔴	Red	🟢	Green	Frequency Channels	3 6 9 12 15 18 21 24 27 30	5V	Anemometer Inputs	5V 5V
	Shield	🟡🟢	Yellow Green	🟡🟢	Yellow Green	Power Input	⏚		BAT	⏚

REQUIRED DATA LOGGER VERSION

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

Minimum **firmware** required: **2.04**. If your data logger has an older firmware version (<2.04), please configure the sensor as a generic sensor (frequency) in both Atlas software and the data logger. Remember to fill in both the slope and the offset for both the pressure sensor.

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

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K611PB | PRESSURE SENSOR

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: Pressure
- Sensor Model: **K611PB**

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.
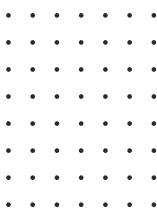5. Click the "left arrow" several times to go back to the main menu.

Data logger model	Firmware version	Sensor model type on data logger		
		Magnitude	Number	Name
ORBIT 360	< 2.04	Pressure	28	Hertz
	≥ 2.04	Pressure	29	PRES K611P
EOL ZENITH	any	Pressure	28	Hertz

Keep in mind: *if the sensor channel has been configured as Hertz, the output values on data logger display will always be shown in Hertz. Remember to fill in both the slope and the offset for pressure sensor to see real sensor values in* **mbar** *in your datasets during a real-time connection with the data logger (from either Atlas or Atlas Mobile).*

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: Anemometer/Frequency
- Sensor Type: Pressure
- Sensor Model: **K611P**
- Slope: 1
- Offset: 600

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