

# PRESSURE TRANSDUCER

*K611P-B*

# BAROMETRIC PRESSURE TRANSDUCER | K611P-B



Certified in Brazil by:



Empresa de Pesquisa Energética

ORDER - Nº	PRESSURE RANGE	ELECTRICAL SUPPLY	MODEL IN EOL MANAGER
K611P-B	600-1100 mbar	5 VDC	K611P

## APPLICATION

The K611P-B pressure sensor is a robust compact sensor specifically designed to meet the requirements in meteorological and wind resource assessment applications.

The sensor offers high performance, easy installation and since the output is in frequency it allows 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 140 m.

The K611P-B is accurate and stable with a long term stability of less than  $\pm 1.0$  mbar (specified in the full operating pressure range 0...+85 °C).

Some of the 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 therefore be installed at any altitude above sea level

\*\* No need to increase the sensor cable cross section for installations at heights with the consequent saving in cable.

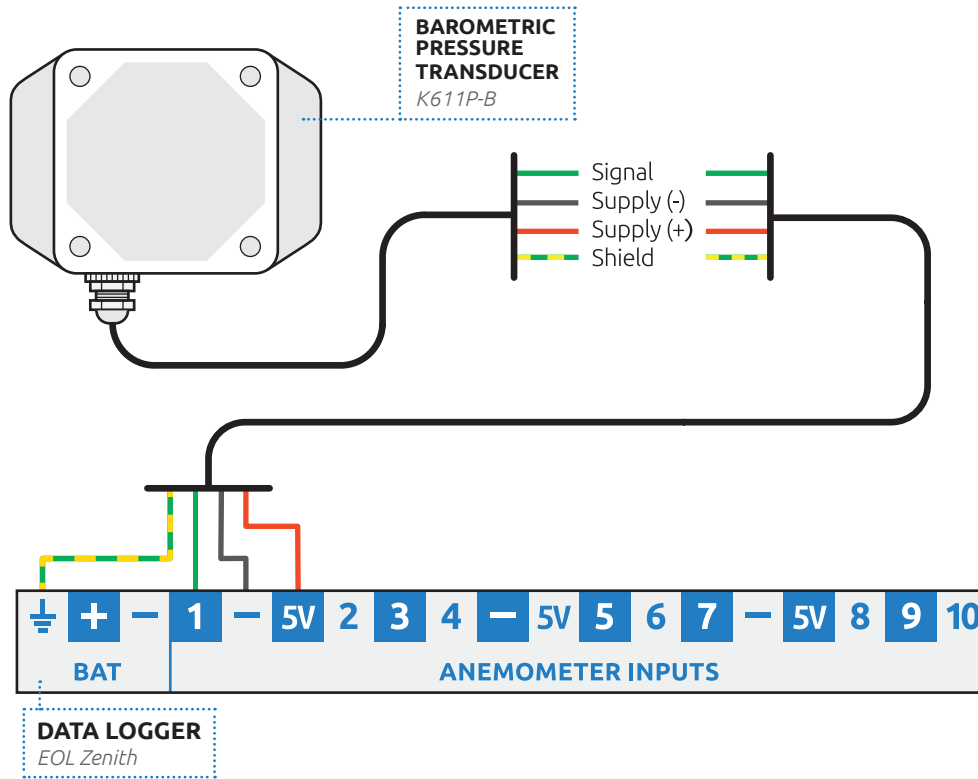
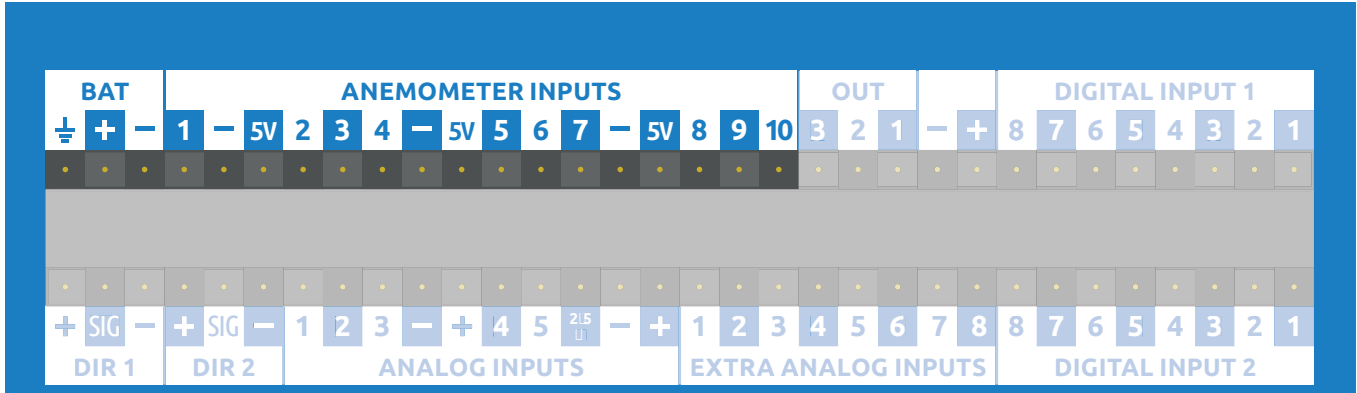
## TECHNICAL DATA

CHARACTERISTIC	DESCRIPTION / VALUE
Pressure range	600...1100 mbar
Low noise	0.05 mbar in standard mode
Overpressure	10000 mbar
Accuracy pressure	$\pm 0.12$ mbar
Long term stability	$\pm 1.0$ 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 °C
Storage temperature	-40...+85 °C
Weight	164 g with cable 2 m long

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## INSTRUCTIONS

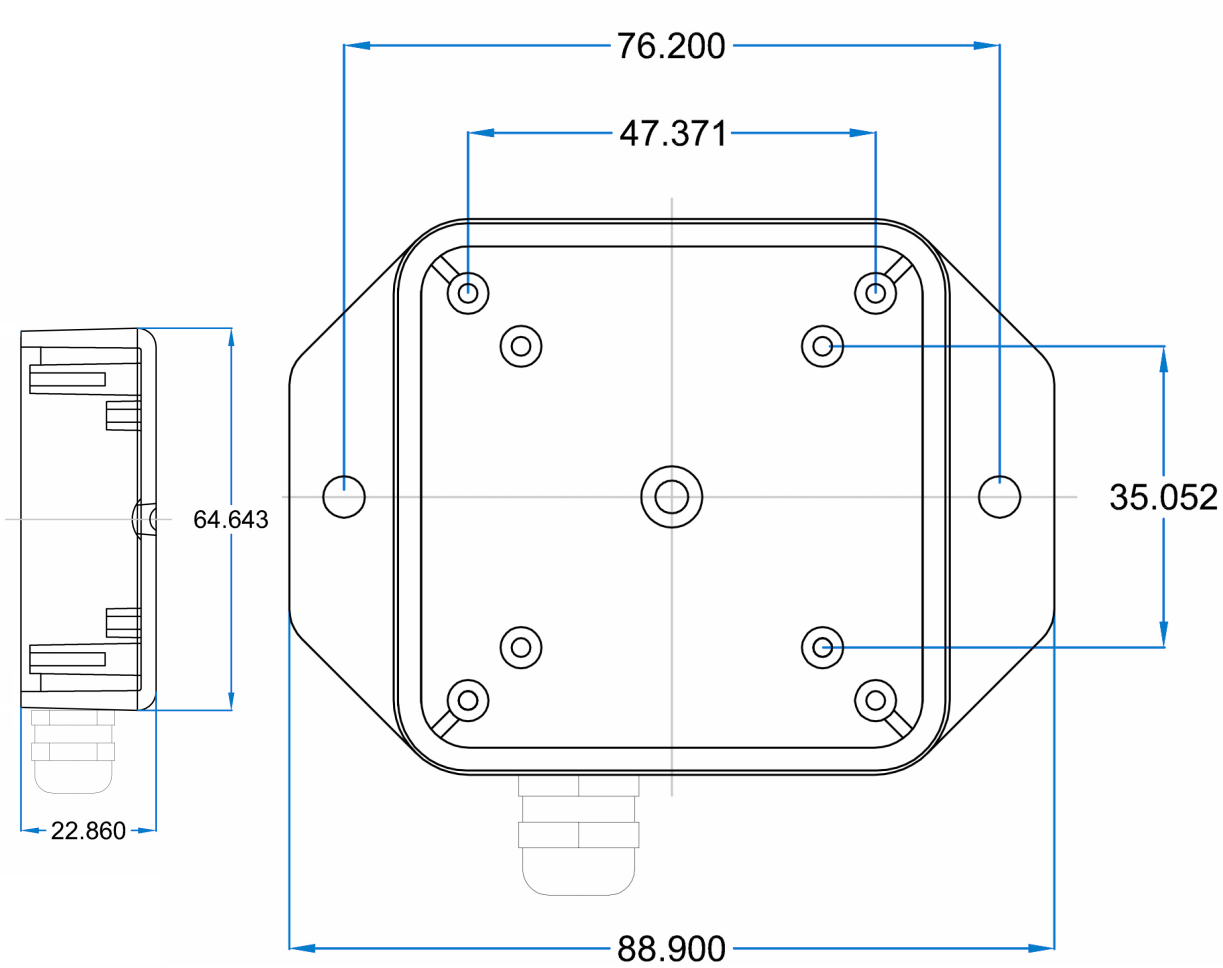
Use the following input channels on the logger to connect this sensor. See highlighted input channels marked here below. The wire colors used in the connection diagram below only applies in case the cable is supplied by Kintech Engineering.  
**For additional wiring & shielding information see the chapter "IMPORTANT" at the end of this dataheet.**



SENSOR PIN DESCRIPTION		DATA LOGGER INPUT CHANNEL		KINTECH COLOR CODES	
Signal		Signal	Anemometer Inputs	1	Green
Supply (-)		Supply (-)	Anemometer Inputs	(-)	Black
Supply (+)		Supply (+)	Anemometer Inputs	5V	Red
Shield		Shield	BAT	GND	Yellow - Green

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## SENSOR DIMENSIONS



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## HOW TO CONFIGURE THIS SENSOR 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:

- ▀ **Section:** Anemometers/Frequency
- ▀ **Type:** Pressure\*
- ▀ **Model:** K611P

\*This sensor should be configured on one of the channels in the Anemometers/Frequency in EOL Manager.

**Calibration values:** Tick the “Std Cal” to use this sensors standard slope and offset. If you have an independent calibration certificate for this sensor insert the slope and offset values from this certificate.

Anemometers/Frequency

Ignore	Channel	Type	Model	Units	Serial Number	Height	Username	Std Cal	Slope	Offset	Std Dev	Max	Min
<input type="checkbox"/>	ANE1	Pressure	K611P	mBar		0	Anemo1	<input checked="" type="checkbox"/>	1,000000	600,000000	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	ANE2	Anemometer	-----	m/s		0	Anemo2	<input type="checkbox"/>	0,000000	0,000000	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

SENSOR SELECTION

MODEL SELECTION

DATASHEET DOWNLOAD

STANDARD CALIBRATION

## IMPORTANT

- ▀ After configuring the sensor in EOL Manager make sure to upload the configuration file to your EOL Zenith data logger. See the “Quick User Guide” how to upload configuration files to the data logger.
- ▀ All sensor wire shields must be connected to the data logger GND terminal.
- ▀ The data logger should always be connected to a separated ground rod. **Not** to the lightning rod of the tower.
- ▀ The three 5V power supply outputs on the data logger terminals are completely independent and not associated to any of the signal inputs. The three 5V outputs can therefore be distributed according to needs.
- ▀ Depending on the firmware version of the logger, different types and models should be configured on the EOL Manager. In all cases, slope=1 and offset=600 on the EOL Manager.

- ▀ To store data such as Std Dev, Max and Min you should tick the corresponding boxes next to each anemometer channel when setting up your site file. Otherwise these parameters will not be stored.
- ▀ This pressure sensor should be connected to one of the anemometer channels on the data logger.
- ▀ In the example diagram shown before, the “Signal” wire from the sensor is connected to the “ANEMOMETER INPUTS 1”. It can however be distributed on all “ANEMOMETER” channels according to needs. Avoid connecting the “Signal” wire of this sensor to the power supply.
- ▀ Cable recommendation:

Sensor	Signal cable 3x0.5mm <sup>2</sup>
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FW VERSION	MODEL	TYPE	LOGGER DISPLAY
≥ x.46	K611P	29	mbar
≥ 1.44	hertz	28	mbar-600
≥ 0.42	hertz	28	mbar-600
other	Contact Kintech support		

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**KINTECH ENGINEERING**

[www.kintech-engineering.com](http://www.kintech-engineering.com)

[support@kintech-engineering.com](mailto:support@kintech-engineering.com)

Tel. +34 976 221 789