

230-60x Barometric Pressure Sensor

The **230-60x Series Barometric Pressure Sensors** offer unparalleled performance and flexibility for atmospheric pressure measurement. They combine high accuracy and low power over a wide range of pressures and temperatures.

The **230-600** BP Sensor with back plate can be mounted in a NovaLynx data logger enclosure or protected in a weathertight polycarbonate enclosure. The **230-601** BP Sensor with enclosure includes 25' cable, and may be pole mounted when the hardware kit is added.



BP Sensor with Back Plate

230-600V / 230-601V

- Calibrated 0-5 VDC analog output (Jumper selectable 0-2.5 VDC)
- Analog current consumption is less than 4 mA. A special “sleep” mode further reduces current draw to a few μ A.
- RS232 serial output included

230-600C / 230-601C

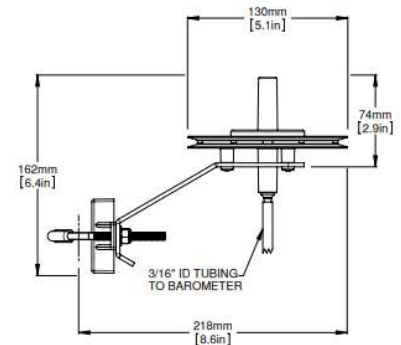
- Standard 4-20 mA output (Programmable 0-20 mA)
- User selectable serial interfaces SDI-12, RS-232, RS-485



BP Sensor with Enclosure

230-61002 Pressure Port Accessory

Measurement performance of remote barometers can be seriously impaired by the effects of wind at the barometer inlet. Ambient wind of 20 meters/second blowing over a typical barometer inlet tube can cause dynamic pressure errors as high as 3 mbar. These errors can make atmospheric pressure data useless for research and forecast purposes. The 230-61002 Pressure Port reduces dynamic pressure errors to a minimum.



230-61002 Pressure Port

Ordering Information

230-600V	Barometric Pressure Sensor, 0-5V output
230-601V	Barometric Pressure Sensor, 0-5V output with enclosure and 25' cable
395-A-003	Mast Mounting Hardware (for use with enclosure)
230-600C	Barometric Pressure Sensor, 4-20mA output
230-601C	Barometric Pressure Sensor, 4-20mA output with enclosure and 25' cable
395-A-003	Mast Mounting Hardware (for use with enclosure)
230-61002	Pressure Port with bracket

Operating Pressure Range	500 to 1100 hPa
Operating Temperature	-40 to +60°C
Digital Accuracy*	0.2 hPa (25°C) 0.3 hPa (-40°C to +60°C)
Analog Accuracy**	0.05% of analog pressure range
Analog Temperature Dependence	0.0017% of analog pressure range per °C (25°C reference)
Long Term Stability	0.08% FS per year
Update Rate	1.8 Hz (max)
Serial Output	Full duplex RS-232 SDI-12, half duplex RS-485 (230-60xC versions only) 1200 to 38400 baud Polled or continuous ASCII text, NMEA
Analog Output	12-bit resolution (1 in 4000)
230-600V and 230-601V	Jumper selectable: 0 to 2500 mV or 0 to 5000 mV (standard)
230-600C and 230-601C	Programmable: 0 to 20 mA or 4 to 20 mA (standard)
Analog Output Scaling	500 to 1100 hPa (standard) Span may be set to any portion of the operating pressure range
Power Supply	7 to 30 VDC
230-600V and 230-601V	3.6 mA with Vout (standard) 2.7 uA shutdown (Trig=0V) 7.6 mA (RS-232)
230-600C and 230-601C	25 mA max (4-20 or 0-20 mA mode) 1.5 mA max in SDI-12 mode 8.5 mA (RS-232 or RS-485)
Sensor with back plate	Fiber-reinforced thermoplastic 3.5" L x 2.4" W x 0.8" D (90 x 60 x 20 mm) 1.5 oz (44 g)
Enclosure (230-601V and 230-601C)	Polycarbonate 4.7" L x 4.7" W x 2.25" D (120 x 120 x 58 mm) 19 oz (544 g)

* Defined as ± 1 standard deviation from NIST-traceable pressure reference in clean, dry air. Includes non-linearity, hysteresis, repeatability, and calibration uncertainty.

** Defined as ± 1 standard deviation from ideal analog output. Total analog output accuracy is the root sum square of digital accuracy, analog accuracy, and analog temperature dependence.