

## 092 Barometer Pressure Sensor

The 092 Barometric Pressure Sensor measures absolute atmospheric pressure and converts it into a linear, proportional voltage, using digital computer technology.

The 092 features robust, low maintenance construction that will withstand a wide-range of adverse weather conditions, and consistently collects reliable barometric pressure data.

## **FEATURES**

- Compact size
- Weatherproof enclosure
- Digital and analog outputs
- Permanent calibration; no service required
- · Customer configured output

### Operation

The enclosure of the 092 sensor houses a solid-state pressure transducer, with linearization and amplification instruments, and a low power embedded CPU.

The standard range of the 092 is 600 to 1100 hPa, which makes it suitable for elevations sea level to 10,000 ft. Other ranges can be configured with DIP switches on the board of the barometer. The digital range is always 600 to 1100 hPa.

#### Construction

- The 092 is contained within a small polycarbonate enclosure with metal weather shield. It may be mounted outside or inside a building
- Small inlet holes allow the atmospheric pressure access to the sensing element



092 Barometric Pressure Sensor

## **SPECIFICATIONS**

#### PERFORMANCE CHARACTERISTICS

Range: 600 to 1100 hPa (17.72 to 32.48 inch/hg)

Elevation: Sea level to 10,000 ft. (3048 m)

Resolution: 0.1 hPa

Temp. Operating Range: -40°C to 55°C (-40°F to 131°F)
Temp. Compensated Range: -40°C to 55°C (-40°F to 131°F)

Accuracy: ±0.35 hPa @ 20°C (68°F)

±1.0 hPa (±0.03 in Hg) over full range or ±0.5 hPa over any 200 hPa range

Long Term Stability: ±1.0 hPa in 1 year

#### **ELECTRICAL CHARACTERISTICS**

Analog Output: 0-1, 0-2, 0-2.5 or 0-5 VDC

(Analog output automatically adjusts from zero to full scale for range selected.)

Digital Output: RS-232, RS-485 & SDI-12
Digital Protocol: ASCII Terminal Mode
RTU for RS-232 and RS-485.
Baud Rates: 1200, 2400, 4800, 9600, & 19.2K

Power Requirement: 10 mA @ 12 VDC, Typical

Power Range: 6-16 VDC

## **PHYSICAL CHARACTERISTICS**

Weight: 8.8 oz. (250 g)

Dimensions: 4.72 x 3.14 x 2.16 in (120 x 80 x 55 mm)

**CABLE** 

PN 1169 Cable Assembly; specify length in feet or meters

Specifications are subject to change at any time.

# Met One Instruments, Inc.

1600 Washington Blvd., Grants Pass, OR 97526 Tel 541.471.7111 Fax 541.471.7116 sales@metone.com

092 Rev. 12/2010