

## PTB278 Analog Barometer

### Wide Temperature Range, High Performance Barometer

The PTB278 barometric pressure transducer is designed for use in environmental applications that require excellent accuracy, fast dynamic response, and long-term stability and reliability.

This pressure sensor is ideally suited to the needs of automated weather stations and environmental monitoring applications. Its housing is constructed of stainless steel and polyester. It will withstand environmental extremes.

The PTB278 utilizes Setra's Setraceram™ capacitive sensor and proprietary custom IC analog circuit. This fundamentally simple design and thermally stable glass fused ceramic sensing capsule is coupled with Setra's sophisticated capacitance charge-balance IC circuit where accurate signal conditioning and environmental compensation is performed. The Setraceram™ sensor provides excellent thermal expansion coefficient and low mechanical hysteresis, which contributes to long-term stability and high accuracy.

#### Features:

- Environmentally rugged
- Operates in temps -40° to +60°C
- Compact (3.6 in x 2.4 in)
- Low power consumption
- Instant warm-up
- Fast response
- 9.5 - 28 VDC power input



#### Technical Specifications

Pressure range:	600 to 1100 hPa
Operating temp:	-40° to +60°C (-40° to +140°F)
Storage temp:	-60° to +120°C (-76° to +248°F)
Supply voltage:	9.5 - 28 VDC
Current consumption:	3mA operating mode 1µA sleep mode
Output:	0 to 5 VDC
Impedance:	< 10 Ω
Noise:	< 50 microvolts RMS
Resolution:	0.01 mb
Total accuracy:	2.0 hPa
Time constant:	< 100 milliseconds
Max pressure:	2000 hPa
Pressure Fitting:	1/8 inch barbed fitting
Dimensions:	3.6" x 2.4" x 1.0"
Weight:	4.8 oz (135g)

#### Ordering Information

PTB278      Analog Barometer