



Microcom Design, Inc.

# Barometer Model 278

P/N: BP-278



The **278** atmospheric pressure transducer is designed for use in environmental applications that require excellent accuracy, fast dynamic response, and long-term stability and reliability. To withstand the environmental extremes typically found in Automated Weather Systems (AWS) applications, the Model 278 housing is constructed of stainless steel and polyester. A terminal strip is provided for connection to DCP's signal/power supply connections, and a 1/8" Barbed fitting is used for pressure connection. The transducer's footprint (3.6" x 2.4" x 1.0") making it ideal for use as a new or drop-in replacement to existing configurations.

## Specifications

**Accuracy:**  $\pm 0.5$  hPa/mb @ +20°C (+68°F)

$\pm 1.0$  hPa/mb @ 0° to +40°C (0 to +104°F)

$\pm 1.5$  hPa/mb @ -20° to +50°C (-4°F to +122°F)

$\pm 2.0$  hPa/mb @ -40° to +60°C (-40°F to +140°F)

**Non-Linearity:**  $\pm 0.4$  mb

**Hysteresis:**  $\pm 0.05$  mb

**Non-Repeatability:**  $\pm 0.03$  mb

**Resolution:** 0.01 mb

**Long Term Stability:** 0.1 mb/Yr

**Warm-up:** <1 sec. from Shutdown Mode (Warm-up shift <0.1 mb maximum)

**Response Time:** <100mSec

### Electrical Data

**Electrical Circuit:** 3 or 4 Wire

**Excitation:** 9.5 to 28 VDC

**Output:** 0 to 2.5VDC; 0 to 5 VDC

**Output Impedance:** <10 Ohms

**Output Noise:** <50 Microvolts

**Current Consumption:** 3 mA Nominal (Operating Mode) 1  $\mu$ A (Sleep Mode)

**Pressure Media:** Non-condensing air or gas.

### Environmental Data

**Operating Temperature:** -40° to +60°C (-40°F to +140°F)

**Storage Temperature:** °F (°C) -60° to +120°C (-76°F to +248°F)

### Physical Description

**Case:** Stainless Steel and Polyester

**Pressure Fitting:** 1/8" (ID dia.) Barbed Fitting

**Electrical Connection:** 5-Pin Terminal Block

**Dimensions:** 3.6" x 2.4" x 1.0"

**Weight:** (approx.) 4.8 oz (135g)

**Pressure Fitting:** 1/8" Tube Fitting

**Pressure Media:** Non-condensing air or gas compatible with stainless steel, alumina ceramics, gold and elastomer.

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