



Microcom Design, Inc.

# Barometer Model 270

P/N: BP-270



The fundamentally simple design and thermally stable glass fused ceramic sensing capsule is coupled with the sophisticated capacitance charge-balance IC circuit where accurate signal conditioning and environmental compensation is performed. Standard accuracy is 0.05% Full Scale, end point method.

Instant warm-up and fast response are achieved in the 270 with the combination of the capacitive sensor and proprietary IC analog circuit.

Applications range from remote weather monitoring and avionics systems, endorsed by government agencies, to crucial compensation for barometric variations in laser interferometers.

## Specifications

**Range:** 600-1100 hPa/mb

**Accuracy:** <0.05% FS

**Hysteresis:** 0.01% FS

**Non-Repeatability:** 0.01% FS

**Resolution:** Infinite, limited only by output noise level (0.005% FS)

**Temperature:**

Operating °F (°C) 0 to +175 (-18 to +80)

Storage °F (°C) -65 to +250 (-54 to +120)

**Compensated Range:** □F (□C) +30 to +120 (-1 to +49)

**Thermal Zero Shift:** Barometric <0.2% FS/100□F

**Thermal Coefficient Sensitivity:** <0.1% FS/100□F (□0.09% FS/50□C)

**Long Term Stability:** <0.1% FS over 6 months at 70□F

**Time Constant:** < 10 milliseconds to reach 90% final output

**Physical**

Pressure fitting 1/8" -27 NPT Internal

Electrical connection 2-foot Multi-conductor Cable

Weight (approx.) 9 ounces (0.25 Kgm)

**Electrical Data**

**Electrical Circuit:** 4-Wire ( +Exc, -Exc, +Out, -Out)

**Excitation:** 22 to 32 VDC (12VDC Optional)

**Output:** 0 to 5 VDC

**Output Impedance:** <5 ohms

**Output Noise:** <200 microvolts RMS (0 Hz to 100 Hz).

Current Consumption: 8 mA (0.2 Watts)

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