



Wide pressure range

For mounting inside
a weather-proof enclosure

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www.campbellsci.eu/cs106

Overview

The CS106 measures barometric pressure for the range of 500 to 1100 mb which equates to from below sea level (as in a mine) to over 15,000 feet above sea level. Designed

for use in environmental applications, the CS106 is compatible with all Campbell Scientific dataloggers.

Benefits and Features

- › Optimized to mount in Campbell Scientific enclosures
- › Low power consumption
- › Three-year warranty
- › Integral switching circuit limits power consumption to the measurement cycle
- › Compatible with all Campbell Scientific dataloggers (including the CR200(X) series)

Technical Description

The CS106 uses Vaisala's BAROCAP silicon capacitive sensor to measure barometric pressure. It is encased in a plastic shell (ABS/PC blend) fitted with an intake port for pressure equilibrium. The CS106 outputs a linear signal

of 0 to 2.5 Vdc, which allows the barometer to be directly connected to a Campbell Scientific datalogger. An internal switching circuit allows the logger to power the CS106 only during measurement, which reduces power usage.

Specifications

- › Accuracy¹: ± 0.3 mb @ 20°C; ± 0.6 mb @ 0° to 40°C; ± 1.0 mb @ -20° to +45°C; ± 1.5 mb @ -40° to +60°C
- › Linearity: ± 0.25 mb
- › Hysteresis: ± 0.03 mb
- › Repeatability: ± 0.03 mb
- › Calibration Uncertainty: ± 0.15 mb
- › Long-Term Stability: ± 0.1 mb per year
- › Supply Voltage Range: 10 to 30 Vdc
- › Current Consumption: 4 mA (active); < 1 μ A (quiescent)
- › Settling Time: 1 s to reach full accuracy after power-up
- › Response Time: 500 ms to reach full accuracy after a pressure step
- › Operating Temperature Range: -40° to 60°C
- › Dimensions: 6.8 x 9.7 x 2.8 cm
- › Cable Diameter: 0.8 cm
- › Weight: 90 g

¹The root sum squared (RSS) of end point non-linearity, hysteresis, repeatability, and calibration uncertainty.

Note: The cable attached to the sensor is optional, in Europe, and if required can be ordered as a length of CABLE5CBL-L.