



Wider Pressure Range

Resides inside weatherproof enclosure

Overview

The CS106, manufactured by Vaisala, measures barometric pressure for the range of 500 to 1100 mb. This range 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
- › Integral switching circuit limits power consumption to measurement cycle
- › Three-year warranty

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 valve for pressure equilibration.

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 datalogger to power the CS106 only during measurement, which reduces power consumption.

Specifications

-NOTE-	1 hPa = 1 mBar
Pressure Range	500 to 1100 hPa
Long-Term Stability	± 0.1 hPa per year
Settling Time	1 s to reach full accuracy after power-up
Response Time	500 ms to reach full accuracy after a pressure step
Output Voltage	0 to 2.5 Vdc

Supply Voltage	10 to 30 Vdc
Elevation	~609.6 m (2,000 ft) below sea level (as in a mine) to 4,572 m (15,000 ft) above sea level
Accuracy	<ul style="list-style-type: none"> › ±1.5 hPa (@ -40° to +60°C) › Accuracy refers to the root sum squared (RSS) of end point non-linearity, hysteresis, repeatability, and calibration uncertainty.

	<ul style="list-style-type: none"> › ±0.3 hPa (@ +20°C) › ±0.6 hPa (@ 0° to 40°C) › ±1.0 hPa (@ -20° to +45°C)
Linearity	±0.25 hPa
Hysteresis	±0.03 hPa
Repeatability	±0.03 hPa
Calibration Uncertainty	±0.15 hPa

Current Consumption	<ul style="list-style-type: none"> › < 1 µA (quiescent) › < 4 mA (active)
Temperature Range	-40° to +60°C
Dimensions	6.8 x 9.7 x 2.8 cm (2.7 x 3.8 x 1.1 in.)
Cable Length	76.2 cm (30 in.)
Weight	90 g (3.2 oz)

For comprehensive details, visit: www.campbellsci.eu/cs106 



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