CAMPBELL SCIENTIFIC®
WHEN MEASUREMENTS MATTER

CS100
Barometric Pressure Sensor

Standard Barometer

Resides inside a weather-proof enclosure

Overview

The CS100 measures barometric pressure for the range of 600 to 1100 hPa (mBar). This range equates to from below sea level (as in a mine) up to 12,000 feet above sea level. Designed for use in environmental applications, the CS100 is compatible with all Campbell Scientific data loggers.

Benefits and Features

❯ Optimized to mount in Campbell Scientific enclosures

❯ Low power consumption

❯ Three-year warranty

❯ 500 to 1100 hPa (mBar) and 800 to 1100 hPa (mBar) versions also available by special order—contact Campbell Scientific

❯ Integral switching circuit limits power consumption to measurement cycle

Detailed Description

The CS100 is a Campbell Scientific version of Setra's model 278 barometer. It uses Setra's Setraceram capacitive sensor and IC analog circuit to measure barometric pressure. The CS100 iincludes a 0.76 m (2.5 ft) cable and a terminal strip for data logger power and signal connections.

The CS100 is encased in a stainless-steel and polyester case fitted with an 1/8 in. barbed fitting for pressure connection. It includes an internal switching circuit that allows the data logger to power the barometer only during measurement, which reduces power usage.

Specifications

-NOTE-	*1 hPa = 1 mBar*	Resolution	±0.01 hPa
Pressure Range	600 to 1100 hPa	Excitation	9.5 to 28 Vdc
Long-Term Stability	±0.1 hPa per year		
Response Time	< 100 ms		

For comprehensive details, visit: **www.campbellsci.com/cs100**

Accuracy	› Accuracy refers to the root sum squared (RSS) of end point non-linearity, hysteresis, repeatability, and calibration uncertainty. › ±0.5 hPa (@ +20℃) › ±1.0 hPa (@ 0° to 40℃) › ±1.5 hPa (@ -20° to +50℃) › ±2.0 hPa (@ -40° to +60℃)	External Trigger Voltage	› 0 Vdc (sleep mode) › 3 to 28 Vdc (operating mode)
Linearity	±0.4 hPa	Current Consumption	› < 3 mA (active) › < 1 µA (sleep mode)
Hysteresis	±0.05 hPa	Operating Temperature Range	-40° to +60℃
Repeatability	±0.03 hPa	Cable Diameter	0.8 cm (0.3 in.)
Warm-up Time	< 1 s	Cable Length	0.8 m (2.5 ft)
		Dimensions	9.1 x 6.1 x 2.5 cm (3.6 x 2.4 x 1.0 in.)
		Weight	135 g (4.8 oz)

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