

Features

High Accuracy and Stability

Accurate within ± 1.5 kPa across a pressure range of 15 to 115 kPa (4.43 to 34.96 in Hg). Long-term non-stability has been measured continuously indoors and in natural conditions (with sensors mounted inside a datalogger enclosure) for multiple sensors and is less than 0.1 % per year. Temperature effects on signal are less than 0.1 % per C across a wide temperature range (-40 to 100 C).

Low Power, Large Signal

Pressure sensor power requirement is approximately:

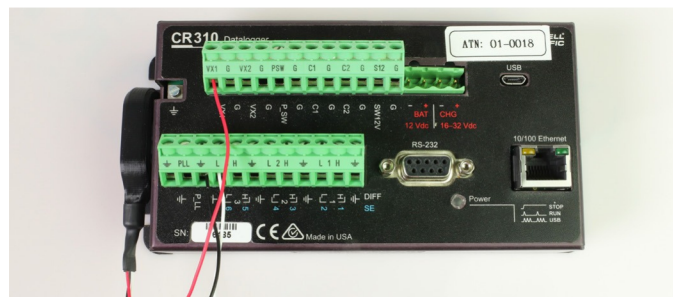
Typical: 30 mW (6 mA, 5 V)

Maximum: 50 mW (10 mA, 5 V) Voltage output ranges from 4.75 to 5.25 V DC for a pressure range of 15 to 115 kPa.

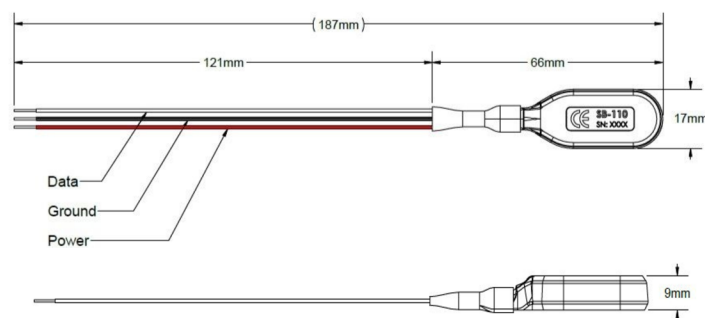
Small Size

Sensor is small and lightweight, enabling easy deployment within a datalogger enclosure, which protects the sensor from the elements.

Product Specifications



Dimensions



SB-110	
Measurement Range	15 to 115 kPa (approximate)
Maximum Pressure Exposure	400 kPa (exposure beyond this limit may cause permanent damage to sensor)
Sensitivity	45.0 mV per kPa; 0.45 mV per 0.01 kPa (approximate)
Calibration Factor	0.0224 kPa per mV (generic slope; reciprocal of sensitivity) and 9.63 kPa (generic intercept)
Measurement Uncertainty	± 1.5 % (with generic calibration coefficients)
Measurement Repeatability	Less than 0.1 %
Non-linearity	Less than 1 %
Warm-up Time	20 ms
Response Time	1 ms
Temperature Response	0.01 % per C
Operating Environment	-40 to 100 C; 0 to 100 % relative humidity (non-condensing)
Input Voltage Requirement	4.75 to 5.25 V DC
Output Voltage Requirement	0.2 to 4.7 V DC
Current Draw	Typ 6 mA DC, Max 10 mA DC
Dimensions	187 mm x 17 mm x 9 mm (L x W x H)
Mass	5 g
Cable	12 cm pigtail
Warranty	4 years against defects in materials and workmanship