BaroVue™10

Product Comparison

The BaroVue™10 is Campbell Scientific's most advanced barometer. It features a wider measurement range (500 to 1100 hPa) that meets World Meteorological Organization (WMO) guidelines and offers superior accuracy (±0.5 hPa), making it ideal for demanding customers. The BaroVue 10 ensures seamless and error-free communications with its digital outputs, supports in-field calibration with hot-swapping sensor cards, and includes a multi-transducer design that eliminates spurious outliers and improves reliability. Its industry-leading, low-power design and onboard self diagnostics (Quality Metric) guarantee operational efficiency and provide peace of mind by ensuring the sensor operates within specifications. The BaroVue 10 is perfect for both large networks and demanding clients.

	CS100 Setra 278	BaroVue 10	BaroVue 10 Benefits
Pressure Range	600 to 1100 hPa	500 to 1100 hPa	The BaroVue 10 has a greater specified measurement range, meeting the WMO's guidance (WMO No. 8) for atmospheric pressure range (500 to 1080 hPa).
Operating Temperature Range	-40° to +60°C	-40° to +60°C	Maintains exceptional temperature range
Accuracy (20°C) Accuracy (-40°C to 60°C)	±0.5 hPa ±2.0 hPa	±0.3 hPa ±0.5 hPa	Offers up to 4x accuracy over the full temperature range
Current Consumption	3 mA (continuous)	200 µA	Significant power savings; eliminates the need for external power control
Digital/Analog Output	Analog only 0 to 2.5 Vdc	Digital only SDI-12, RS-232 serial	Digital sensors provide multiple measurements. All uncertainty is contained in and traceable to the sensor. Eliminates uncertainty introduced through the combination of sensor DAC and data logger Adc
In-Field Calibration	No	Yes (hot-swap sensor card)	In-field calibration is a key practice to ensure operational efficiency within a network, resulting in zero down-time.
Multiple Transducers	No	Yes	Having multiple transducers allows for redundancy and eliminates outliers. Multiple transducers are needed to calculate the Quality Metric.
Long-Term Stability	±0.1 hPa/yr	± 0.1 hPa/yr	Excellent stability
Sensor Diagnostics	No	Yes	The Quality Metric ensures high reliability by monitoring how closely individual barometric pressure sensing chips track each other. This metric helps identify when a sensor chip needs replacement due to measurement divergence. Additionally, the sensor's firmware enhances accuracy by excluding the output of any faulty sensing chip from barometric pressure calculations.

For comprehensive details, visit **www.campbellsci.com/barovue10**.

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