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Small device - big performance

Compact Vaisala BAROCAP® Barometer PTB110

Vaisala has introduced a new series of barometers, the Vaisala BAROCAP® Barometer PTB110 to replace the very successful PTB100/101 series analog barometers. The new barometers are compact and small in every respect - except their overall performance.

The PTB110 is a microcontroller based barometer designed both for accurate barometric pressure measurements at room temperature as well as for general environmental pressure monitoring over a wide temperature range. The barometer provides alternative pressure scales within the range of 500...1100 hPa. The operating temperature ranges from -40 °C up to +60 °C. Both voltage and frequency outputs are available.

Patented Vaisala technology provides long-term stability

The BAROCAP® silicon capacitive absolute pressure sensor, developed by Vaisala, is the heart of the barometer. The sensor combines the outstanding elasticity characteristics and mechanical stability of single-crystal silicon with a proven capacitive detection principle, providing excellent long-term stability. All PTB110 barometers are calibrated at the factory as traceable to NIST (National Institute

of Standards and Technology, USA) and supplied with a multipoint calibration certificate.

Low power consumption

Connecting/disconnecting the barometer is easy with a removable terminal connector. A DIN rail mounting option enables the barometer to be mounted on a 35 mm wide standard mounting rail. The barometer consumes very little power, making it very suitable for battery or solar power operated systems where low power consumption of the system is essential. The PTB110 can also be set to shutdown mode. Here one of the input terminals is used as an external power on/power off trigger, which lowers the overall power consumption even further. After switching the power on, the barometer responds very quickly. Within 500 ms, full accuracy pressure output is available.

The compact PTB110 is suitable for a variety of applications, such as environmental pressure monitoring, data buoys, laser interferometers, and in agriculture and hydrology. Thanks to its very low power consumption, the barometer is particularly ideal for different data logger applications. ■



The Vaisala BAROCAP® Barometer PTB110 can be used in data buoys, among other applications.