VAISALA

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Vaisala BAROCAP® Pressure Module



Features/Benefits

- Based on silicon capacitive sensor technology - BAROCAP[®]
- Excellent accuracy, repeatability, and long-term stability
- Wide operating temperature range
- Calibration traceable to international standards (NIST)
- An optional barometer module for the Vaisala Data Logger QML201

The Vaisala BAROCAP® Pressure Module has excellent accuracy, repeatibility and long-term stability over a wide range of operating temperatures. The total accuracy is ± 0.25 hPa with factory calibration. It is well suited for demanding synoptic applications, and an affordable choice for Vaisala automatic weather stations utilizing the Vaisala Data Logger QML201.

The fine adjustment and calibration of the sensor are handled using the electronic working standards, which are traceable to international standards (NIST). The pressure module can be calibrated independently of the QML201 data logger.

The pressure module is located on the QML201 CPU board. The pressure range of the sensor is $500 \dots 1100$ hPa and operating temperature range $-40 \dots +60$ °C.



Pressure module located on the central processing unit QML201.

Technical data

| Property | Description/value |
|---------------------------------------|-------------------|
| Pressure range | 500 1100 hPa |
| Linearity * | ± 0.10 hPa |
| Hysteresis * | ± 0.03 hPa |
| Repeatability * | ± 0.03 hPa |
| Calibration uncertainty ** | ± 0.15 hPa |
| Accuracy at +20 °C (+68 °F) *** | ± 0.20 hPa |
| Temperature dependence **** | ± 0.10 hPa |
| Total accuracy at -40 +60 °C (-40 +14 | 0 °F) ± 0.25 hPa |
| Long-term stability | ± 0.10 hPa/year |
| Operating temperature range | -40+60 °C |
| Resolution | 0.10 hPa |

* Defined as ± 2 standard deviation limits of endpoint non-linearity, hysteresis error or repeatability error.

- ** Defined as ± 2 standard deviation limits of inaccuracy of the working standard including traceability to NIST.
- *** Defined as the root sum of the squares (RSS) of endpoint non-linearity, hysteresis error, repeatability error and calibration uncertainty at room temperature.
- **** Defined as ± 2 standard deviation limits of temperature dependence over the operating temperature range.



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