

Digital Barometer PTB330

Atmospheric pressure measurement utilizing advanced BAROCAP technology



Key benefits

Current and historical data capture

The PTB330 quickly and accurately calculates instant pressure along with WMO pressure trend and tendency code (pressure tendency looking back three hours) for immediate forecasting and long-term modeling. It also stores 12 months of data for review.

Added reliability through redundant measurement

Incorporate one, two, or three BAROCAP sensors for redundant pressure measurement. With two or three sensors connected, the unit constantly compares readings to ensure stable, reliable pressure readings.

High measurement accuracy and excellent long-term stability

BAROCAP single-crystal silicon material and capacitive structure sensor technology in the PTB330 allows it to consistently and reliably operate over a wide temperature range, even for highly demanding professional meteorology needs.

Installation versatility and maintenance ease

An IP65-rated housing and AC or DC power source means the PTB330 excels in unusual outdoor applications. It can be wall mounted or connected to a standard DIN rail, and includes an easy-detachment mounting plate. A pole installation kit with a rain shield is also available.

Flexible data communication

An RS232 serial output is standard with optional use of a high-speed RS485 serial line. The PTB330 also offers USB connection to a PC either via a terminal program or Windows® software application. Linear voltage and current output for pressure are also available.

According to the World Meteorological Organization (WMO), analyzed pressure fields are a fundamental requirement of meteorology. We are in full agreement. After all, barometric pressure is a key parameter for weather prediction, and the accuracy of atmospheric pressure data forms the basis of all reliable weather forecasting.

The Vaisala Digital Barometer PTB330 leverages our trademarked BAROCAP® sensor technology that combines absolute pressure measurement and exceptional accuracy with low hysteresis and long-term stability. Whether you are tracking the movement of local and regional weather fronts, generating historical models of high- and low-pressure systems, or monitoring developing severe weather for an early warning system, the PTB330 will deliver accurate barometric pressure readings under the harshest of conditions — even in space.

PTB330 at a glance

Applications

- Generating reliable and accurate information regarding potential major changes in weather.
- Enabling early warning systems to protect lives and property from potentially destructive weather events.
- Tracking the progress of weather fronts.
- Predicting upcoming and sudden changes in weather as indicated by changes in barometric pressure.
- Defining the high- and low-pressure systems for generation of numerical weather models.
- Automatic reporting of QNH and QFE reading for aviation users.

Key features

Sensor redundancy supports critical and demanding applications where accurate results are a must.

Advanced sensor technology that leverages single-crystal silicon material and capacitive structure to deliver absolute pressure measurement with low hysteresis, high repeatability.

Intuitive menu-based interface for easy customization of unit display around your specific informational demands.

Multilingual display allows data viewing in English, German, French, Spanish, Swedish, Finnish, Japanese, or Russian.

Graphical display with six different time windows lets you compare and review weather trends using historical data as far back as one year.

Wired or battery power with voltage supply ranges from 10 to 35 VDC, allowing for use in battery-powered applications. An external AC supply enables connection to all universal main AC supplies.

Two alternative accuracy classes, including Class A accuracy for the most demanding applications such as barometric reference, and Class B accuracy for more conventional use.

Why Vaisala?

More than 80 years of weather sensing expertise

Vaisala delivers the most accurate real-time and historical pressure data in the world. For decades, meteorological agencies around the world have relied on Vaisala technology to improve forecasts and weather services. Our technology is trusted by the National Weather Service, the Federal Aviation Administration, worldwide defense forces, and commercial safety operations across the planet. Vaisala BAROCAP sensors have even been utilized on exploration missions to Mars, Saturn, and Saturn's largest moon, Titan.

Support you can count on

Look to Vaisala for dependable support, project capabilities, and training so you can get the most from your system. With decades of experience providing the best technologies and the finest support, Vaisala's philosophy of partnership is unmatched in the industry.

Trusted weather observations for a sustainable future

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