

## Pressure, Humidity, and Temperature Transmitter PTU307

Multi-parameter icing conditions awareness for wind energy



### Key benefits

#### Protect your most important investments

Icing presents significant risks to nearby personnel and equipment. With proper ice detection and warnings, everyone can be prepared. Mechanical strains from accumulated ice can also be minimized, increasing the life of the turbine.

#### Increase efficiency and uptime

Wind farms often use ice mitigation practices such as blade heating, but they need to know when and how to use them. Intelligence from the PTU307 increases uptime and operating hours when they matter most.

#### Stay compliant and proactive

Ice detection is often a compliance issue, and the right data ensures wind farms are meeting requirements and showing due diligence. PTU307 users don't have to wait for an incident and react when it's already too late.

**The Vaisala Pressure, Humidity, and Temperature Transmitter PTU307 is the ideal tool for wind energy operators and turbine manufacturers to assess the meteorological conditions that lead to icing on rotor blades. It reliably reports the key parameters of pressure, temperature, and humidity without adding substantial cost or complexity.**

Icing is a dangerous and efficiency-compromising phenomenon that affects many wind farms, both onshore and offshore. Just as ice on an airplane wing reduces that wing's performance in unpredictable ways, ice on a rotor blade can cause risk to personnel and harm expensive, precisely calibrated systems. With the PTU307, users can maintain full awareness of the conditions that lead to ice and never be caught unprepared.

## PTU307 at a glance

### Applications

- Multi-parameter monitoring of wind turbine icing conditions
- Fully integrated weather monitoring at any phase of wind operations



### Key features

**Built on proven BAROCAP® and HUMICAP® technology** known for accuracy and long-term stability in all conditions. The temperature sensor is a platinum RTD sensor, and the PTU307 uses a heated probe for demanding applications.

**Versatile data outputs** compatible with major GPS receivers and NMEA-coded messages. The unit comes with an RS-232 serial interface and can apply Modbus protocols and use TCP/IP (ethernet) communication. Connecting a PC is simple with the provided USB cable, and an isolated RS-485 interface is available.

**Modern, graphical display and keypad** with multilingual menus. Users can easily monitor operational data, see measurement trends, and access historical data. An optional data logger with real-time clock enables users to generate more than four years of history and zoom in on any time frame.

**Flexible calibration and setup** for all three sensors, with calibration and field checks completed at the same time with a quick, one-point operation. An optional installation kit makes outdoor installs simple.

**Flexibility for adding additional meteorological parameters** by integrating ceilometers or present-weather sensors for even more detailed information about ice events.

## Why Vaisala for renewable energy?

We are innovators, scientists, and discoverers who are helping fundamentally change how the world is powered. Vaisala elevates wind and solar customers around the globe so they can meet the greatest energy challenges of our time.

Our weather and environmental monitoring solutions for renewable energy are guided by several key priorities:

- Thoughtful evolution in a time of change
- Making renewable energy smarter at every stage
- Extending our legacy of leadership

Vaisala is the only company to offer 360-degree renewable energy solutions — from sensors and systems to digital services and actionable intelligence — nearly anywhere on the planet (and even on Mars). Every Vaisala solution benefits from our 85+ years of experience, pioneering deployments in 170+ countries, and unrivaled thought leadership.

Our innovation story, like the renewable energy story, continues.

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