

Weather Transmitter WXT530 Series

Affordable, compact, accurate weather measurement options



Not all onshore, offshore, and shipboard applications necessitate the expense or magnitude of an automatic weather station. They do, however, require the same levels of durability and data reliability that you can trust 24/7.

Vaisala Weather Transmitter WXT530 series is a unique collection of sensors that capture a combination of barometric pressure, humidity, precipitation, temperature, wind speed, and wind direction readings in a compact, affordable package. The WXT530 Series utilizes solid state technologies to minimize operating and maintenance costs. Integration is easy and flexible through the digital and analog interface, and you can also connect third-party sensors to select WXT530 models to create your own system.

With a range of WXT530 models to choose from, Vaisala delivers the right weather sensor capabilities for your needs and budget.

Key benefits

Designed for demanding environment

With no moving parts, WTX530 models are durable, can be calibrated on site or at sea, and require little to no maintenance. They leverage unique Vaisala solid state sensor technology that includes WINDCAP® ultrasonic wind sensors to determine horizontal wind speed and direction, an easy to change PTU module using Capacitive BAROCAP® sensor for barometric pressure, HUMICAP® R2 sensor for humidity and resistive platinum sensor for air temperature, and acoustic RAINCAP® sensor to measure precipitation without flooding, clogging, wetting, or evaporation losses.

Multifunctional use

WXT530 is a series of weather instruments that measure six of the most important weather parameters (air pressure, temperature, humidity, rainfall, wind speed, and direction) in various combinations. With a wide range of modes and voltages available, simply select the weather parameters you need to determine the right fit. All models offer a heated option for cold weather accuracy and their low level of power consumption make the WTX530 Series ideal for onshore, offshore, and vessel-mounted applications that require battery use, such as buoys.

Straightforward integration and expansion

They are compact, easy to install, and provide maintenance-free operation.

The WTX530 Series offers a wide range of digital and analog communications connection options and integrates, into third-party data collection platforms.

WXT530 Series at a glance

Option	Rainfall	Wind Speed	Wind Direction	Air Pressure	Temperature	Humidity
WXT531	•					
WXT532		•	•			
WXT533	•	•	•			
WXT534				•	•	•
WXT535	•			•	•	•
WXT536	•	•	•	•	•	•

Key features

Zero moving parts minimizes maintenance and eliminates mechanical failure related data errors.

Six different configurations deliver the exact mix of weather measurements to meet your particular needs.

Self-diagnostics automatically validate measurement stability.

3-transducer layout enables a turbulence-free measurement path for data that is always accurate and reliable.

Optional thermostatically controlled heaters in the transducer heads and arms prevent build-up of freezing rain and snow for operation in the harshest and coldest environments.

Why Vaisala?

Experience with perspective

Building on more than 80 years of experience, Vaisala has a unique understanding of weather measurement that has made Vaisala a trusted leader in maritime and aviation weather observation solutions. The unique technologies we offer are the result of our own R&D. and our solutions and services are used in environmental monitoring systems, helideck monitoring systems, and marine weather reporting worldwide. Our extensive expertise and global presence — with solutions in over 120 countries and all seven oceans — makes us your global maritime weather expert.

Support to 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.



