

Weather Radar WRS300 for meteorology

Cutting-edge C-band radar technology for high-performance weather surveillance and smart early-warning decisions



The future of weather radar design is here.
And it's Solid.

Severe weather is part of our world — and the frequency and severity are increasing with changes to our climate. We cannot control the weather, but we can reduce its impact on vulnerable communities.

The Vaisala Weather Radar WRS300 redefines weather detection with high performance and exceptional accuracy in an integrated, low-maintenance package for improved prediction of and preparation for adverse weather. The newest addition to Vaisala's solid state weather radar family, the C-band weather radar combines Vaisala's industry-leading data processing to excel at delivering high-resolution weather forecasting information that differentiates between snow, hail, sleet, graupel and rain.

As a stand-alone solution, the C-band weather radar covers large areas. Paired with the X-band radar—which provides unparalleled short-range coverage—decision-makers get the most comprehensive intelligence in the industry.

Key benefits

Make smart, early decisions with comprehensive coverage

The most efficient radar of its kind leverages solid state power amplification to enable weather detection across large areas with unprecedented longevity. Provides high-quality data with over 99% data availability. Stable radio wave output and cutting-edge observation techniques reduces observation time and increases data accuracy.

Rely on continuous operation in the harshest weather

Provides high-quality data 24/7 in high altitude, structural icing, dust, wind, power outages, and other demanding conditions. Solid state transmitters continue operating even in the event of semiconductor device issues, and problem devices can be replaced without shutting down the whole radar system.

Detect the elements with precision accuracy

Vaisala's patented technology lets you measure various characteristics of weather and provide high-resolution weather forecasting with short lead times. Leverages dual-polarization to deliver exceptional accuracy and sensitivity for more precise, higher resolution weather information — even differentiating between snow, hail, sleet, graupel and rain.

Focus on the weather, not maintenance and costs

Remote operation and automatic and continuous calibration makes WRS300 easier to maintain with fewer site visits required. Running costs are drastically reduced through long-life transmitters and low power consumption.

Our commitment to solid state technology, compact architecture, and built-in redundancy with no consumables provides the most sensitivity to deliver exceptional accuracy at optimized life cycle cost.

Key features

- **High-quality data** with over 99% data availability.
- **Industry-leading data processing** ensures ultra-defined data for precipitation estimation and hydrometeor classification.
- **Built to work 24/7** in high altitude, structural icing, dust, wind, power outages, and other demanding conditions.
- **Comprehensive coverage** with fully integrated & optimized radar networks using both X- and C-band radars.
- **High-resolution intelligence** secured by Vaisala's patented technologies.
- **Measures various characteristics of weather** and enables high-resolution weather forecasting with short lead times.
- **Dual polarization** delivers exceptional accuracy and sensitivity for more precise, higher resolution weather information — even differentiating between snow, hail, sleet, graupel and rain.
- **Simple deployment** offers simple site selection with quick and easy installation plus integration into existing networks.
- **Remote operation and automatic, continuous calibration** reduce site visits and maintenance. Easy installation and calibration ensures no surprises and low lifetime cost.

Why Vaisala?

The industry's most dependable weather observations

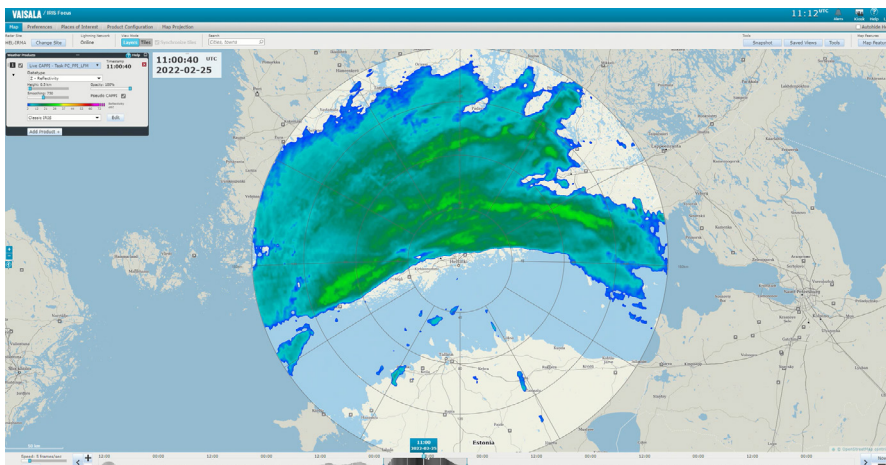
The precision and reliability of our C- and X-band radars have been validated time and time again in operational use and extensive testing with university partners — all built on over 85 years of industry leadership. More than 60 meteorological institutes and other organizations trust Vaisala to provide their weather radar, with more than 220 weather radar systems delivered across the globe.

Insight every day

The combined power of our weather and environmental solutions provide dependable intelligence people can confidently act on to make better decisions. With Vaisala, you can count on our 360 degree solutions that are extensively put to the test across the world and proven to consistently provide superior performance.

Reliable support

Know that you're covered if questions arise with 24/7 global support — now and in the future. We offer 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

VAISALA

vaisala.com/WRS300



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