

# Vaisala X-band Weather Radar for Meteorological Surveillance

## Product Spotlight

### Providing trusted weather observations for a sustainable future

Vaisala helps customers establish weather observation networks and build up capabilities that improve their capacity to assess, predict, and prepare for extreme weather. In addition, we support the scientific community in its efforts to increase knowledge of our changing climate and its impacts by enabling the most accurate observations of the world.



## Key benefits

Receive comprehensive coverage with fully integrated and optimized radar networks using both X- and C-band radars.

The radar is designed with the most sensitivity to deliver exceptional accuracy for short-range meteorological surveillance at optimized lifecycle cost.

The Vaisala X-band Weather Radar enhances data quality in strategic locations and delivers information at a higher resolution and with better precision.

Affordable and networked, X-band is fully compatible with existing weather radar systems (like the C-band radar) to strengthen weather intelligence for your operations.

## Why Vaisala?

As the global leader in weather and environmental measurements, Vaisala provides trusted weather observations for a sustainable future. With over 85 years of experience and customers in 170+ countries, from the North and South Poles to Mars, we help provide the most reliable and accurate weather and climate information for better and safer daily lives.

Our instruments and intelligence are known as the gold standard for precision and reliability. As a sustainability leader we enable meteorology professionals to better understand, forecast and explain climate change. We continue to channel our curiosity into climate action and new ways of enabling a better planet for all.

The new X-band Weather Radar provides highly accurate measurements for a limited area, filling in a gap in a national radar network. Severe weather in mountainous areas and gaps under sparse weather radar networks will now be visible when X-band radars are added to the weather radar networks, with accurate detection and nowcasting of hazardous conditions.

## A better way to measure

Leveraging dual-polarization performance designed to deliver exceptional accuracy, the X-band Weather Radar delivers clean data to increase safety and improve operational efficiency. X-band utilizes simple site selection, automatic and continuous calibration, easy installation and integration into existing networks, a simplified signal path and new measurement methods to make this technology industry leading. Remote operation and diagnostics reduce the need for site visits and empower decision-makers with high data quality and availability, as well as improved sensitivity.

## User-friendly system design

- **Compact and transportable:** With most equipment in the radome, the small size, smaller environmental impact, and ease of installation on existing buildings allow for more freedom in site selection.
- **Modular design:** Allows for additional modules and higher transmitted power.
- **Streamlined standard manufacturing and delivery:** With no change in familiar work environment or tools, on-site work is minimized.
- **Reliable in any environment:** From temperature and humidity to high altitudes, structural icing, dust, wind, power outages, and more, the X-band Weather Radar enables 24/7 operation in even the most demanding applications.
- **Ease of integration:** Specifically designed to seamlessly integrate with Vaisala IRIS Weather Radar Software.

