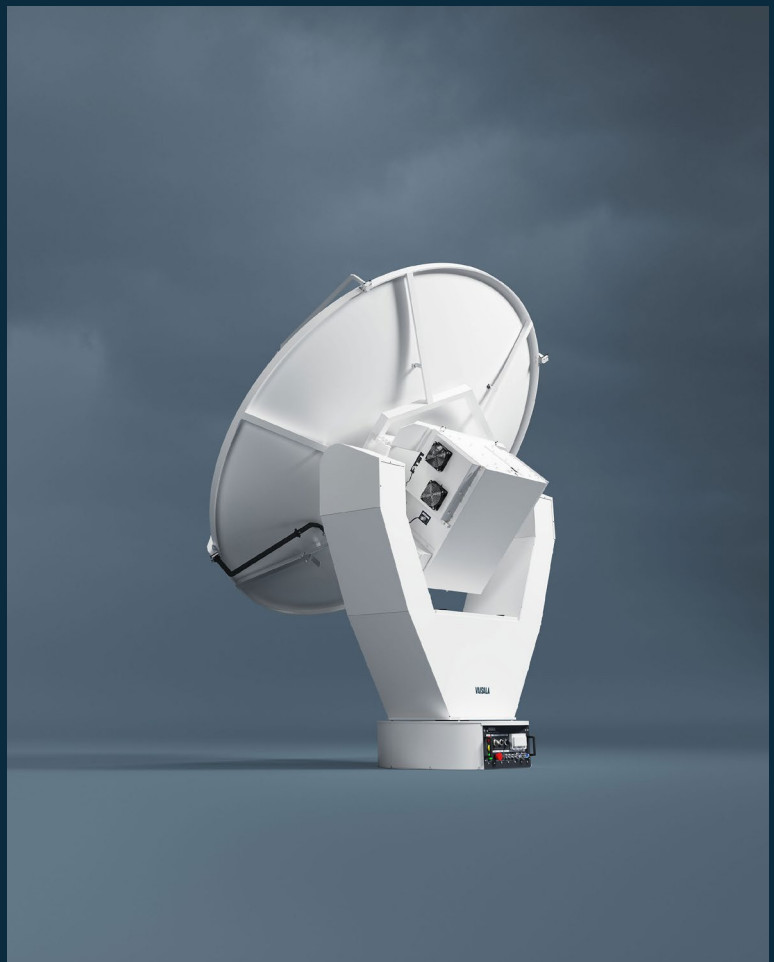


X-Band Weather Radar WRS400 for urban weather resilience

Product Spotlight

Natural disasters in urban areas are made worse by impervious surfaces and urban heat islands. Severe weather also has a major impact on society and the economy. Detailed local weather data is critical for cities to respond quickly to emergencies.

The Vaisala X-band Weather Radar WRS400 is a pivotal asset for city decision-makers focused on enhancing resilience against flooding and other hyperlocal, extreme weather events.



Key benefits

Close data monitoring gaps: Address gaps in traditional radar coverage with high-resolution, hyperlocal weather data.

Optimize emergency weather preparedness: Use precise, real-time, localized data to protect citizens.

Improve flood risk management: Utilize precise precipitation data and essential weather information to effectively manage flood risks and tackle urban flooding challenges.

Efficiently deploy weather monitoring: Get started with short installation times and easy network integration for enhanced monitoring, thanks to compact and flexible design.

Ensure continuous operation with low lifetime costs: Depend on the radar's resilience for uninterrupted weather monitoring, affordability and low maintenance.

Advance weather analysis and forecasting: Improve weather analysis and forecasting for timely warnings.

Why Vaisala?

As the global leader in weather and environmental measurements, Vaisala empowers businesses and community leaders to build resilience to climate change and extreme weather events. Our nearly 90 years of expertise is grounded in science, innovation and our unwavering commitment to constantly evolving.

We boldly demonstrate that a culture of resilience and a connection to nature can create new ways of smarter, resilient living. We are champions for smarter, safer and more sustainable urban communities.

The X-band Weather Radar WRS400 is specifically designed to address the challenges of urban weather resilience. It provides detailed, localized weather detection that is crucial for understanding and preparing for storm systems and their associated impacts.

The radar's ability to deliver precise, high-resolution data on precipitation type and ground-level amounts enhances flood risk assessment and management. This is particularly valuable for cities aiming to mitigate the effects of severe weather and ensure public safety.

WRS400's easy installation and data compatibility with existing radar networks allow for rapid deployment, enabling cities to quickly improve their weather monitoring capabilities.

Its reliability and operational resilience in demanding conditions ensure continuous monitoring and data availability, which are vital for timely decision-making during severe weather events.

By providing accurate and quantitative precipitation estimates, WRS400 enhances severe weather analysis, nowcasting, and short-range forecasting, leading to improved warnings and more informed decision-making processes.

This advanced radar system fills critical gaps in traditional long-range radar networks by focusing on hyperlocal phenomena close to the ground, making it an indispensable tool for cities committed to safeguarding against extreme weather hazards.

Applications in urban areas

- City-specific weather nowcasting, monitoring and warnings
- High-resolution urban hydrological modeling
- Data for wastewater, treatment plants
- Weather-critical infrastructure
- Traffic and road maintenance

