

Forward Scatter Sensor FD70 for defense applications

Product Spotlight

Making weather your ally

Enhance mission-critical airfield operations with transformative, reliable forward scatter technology. Optimize airfield operations – and know the weather before you see it.

From dust to ice and freezing rain, Vaisala Forward Scatter Sensor FD70 provides unparalleled accuracy when detecting precipitation and other elements to support safer and more efficient takeoffs and landings.



Key benefits

Ensure safe takeoffs and landings at military airfields for both manned and unmanned aircraft.

Get uncompromised visibility and weather detection in every condition and form of precipitation or obscuration, essential for locations where visibility can change rapidly.

Rely on proven durability with low maintenance requirements and remote troubleshooting, ideal for use in demanding environments without the need for constant manual intervention.

Count on advanced, seventh-generation technology fully compliant with ICAO, FAA and WMO regulations, built at the optimal 42° forward scatter angle, and with advanced software security to prevent unauthorized access.

Why Vaisala?

Vaisala is the world's most trusted provider of weather observation systems for tactical operations, with nearly 90 years of innovation and expertise.

Committed to excellence, we take every measure to ensure our systems are not only comprehensive in their observations but also meet the most stringent performance requirements in any situation.

We provide 24/7 global support, extensive project capabilities and thorough training throughout the entire lifespan of your system to help you make weather your ally when it matters most.

Master the elements, improve efficiency and fulfill your most important operations

FD70 is the ultimate tool for mastering airfield visibility challenges for safe operations. Unmatched in its ability to detect every obscuration—from sand and dust to precipitation—FD70 excels in visibility and present weather assessment, measuring real-time visibility (MOR) for assessing visibility and runway visual range (RVR).

FD70's visibility range of up to 100 km (62 mi) provides critical situational awareness for airfield commanders and flight operators. Outperforming human observation, FD70 delivers constant, reference-grade performance, automatically detecting and reporting even the slightest visibility obscurations. This advanced sensor can replace multiple separate devices, including visibility and present weather sensors, freezing rain detectors, and rain gauges.

Backed by over 30 years of forward scatter technology development, FD70 offers unparalleled measurement speed, uncompromised accuracy and dependable reliability. Features like remote access, automatic troubleshooting, and low maintenance ensure minimal lifetime costs while optimizing performance, making it an indispensable asset for critical defense operations.

Present weather identification available in FD70

- Drizzle
- Rain
- Snow
- Snow grains
- Ice crystals
- Ice pellets
- Freezing drizzle
- Freezing rain
- Snow pellets
- Hail
- Fog
- Mist
- Haze
- Sand-dust
- Mixed rain/snow

