

Thunderstorm Local Lightning Sensor TSS928

VAISALA

Product Spotlight

Providing trusted aviation weather from cloud to ground

Early, precise lightning detection to keep airport operations running smoothly

Accurate, local lightning detection is a critical aspect of airport operations. Advanced awareness of potential lightning threats allow you to assess risks quickly, circulate advance warnings in a timely manner, initiate safety procedures more efficiently, and isolate airport equipment with full confidence.



Key benefits

Industry-leading, ultramodern detection sensors: The patented optical signal processing and proprietary optical-coincidence technology prevents false alarms. The TSS928's modular design allows easier field service and on-site maintenance, and its self-diagnostics features consistently check sensor function status.

Critical lightning data at your fingertips:

- Warning of cloud-to-ground lightning
- Weather station integration
- Detect + differentiate between cloud-to-ground and cloud lightning discharges
- Cloud and cloud-to-ground lightning discharge range estimates within 56km (~35mi)
- CG lightning alerts
- CG lightning ranging and direction
- Zero false alarms aids cloud to cloud detection
- Lightning direction provided by MDF
- Processing B and E field waveforms

Why Vaisala?

For over 45 years, Vaisala has been a pioneer in aviation weather technology, ensuring that every measure is taken for unparalleled safety, efficiency, and sustainability.

Our gold standard suite of solutions is trusted in more than 170 countries and over 2000 airports globally. In fact, every commercial flight around the world will use weather observations produced by Vaisala equipment or forecasts driven by our sensor measurements at some point in their journey.

With a commitment to constantly evolving our portfolio, Vaisala remains at the forefront of the industry, continuously exploring new horizons.

The Thunderstorm Local Lightning Sensor TSS928 delivers the superior performance that aviation operations require from local area lightning tracking. It meets ASOS requirements and accurately reports the range and direction of cloud-to-ground lightning and provides cloud lightning counts in real time – even in the most extreme weather conditions.

The TSS928 is built on sensor technology and patented lightning algorithms that provide the most precise detection of any stand-alone lightning sensor available in the world today, and it can be easily integrated with automated surface weather observations to streamline critical operational and safety decisions.

Applications for airports

- Better controlled airport facilities
- Safer fueling operations
- More secure cargo loading and unloading
- Safer passenger boarding and deplaning
- Shorter taxiing operations

