

Vaisala

Transmissometer LT31

VAISALA

Product Spotlight

Providing trusted aviation weather from cloud to ground

The industry's most accurate runway visibility data

Transmissometer technology is proven to provide the best visibility measurement accuracy for Runway Visual Range (RVR), and Vaisala's LT31 is the most trusted and frequently used transmissometer in the world. With low installation and lifetime operating costs, the LT31 is also the most pioneering transmissometer technology. It automates many critical functions to provide unmatched accuracy, outstanding uptime, and minimal maintenance needs.



Key benefits

Vaisala-patented automatic calibration ensures measurement performance consistency.

Automatic alignment significantly reduces the need for manual work.

Intelligent contamination avoidance and compensation using optimized hood and blower designs, as well as automatic contamination measurement and adjustment compensation.

Meteorological Optical Range (MOR) of 10km, covering the full required range for CAT I through CAT IIIB airports, as well as ICAO-defined visibility range for aeronautical use.

Full compliance with ICAO and WMO requirements.

White LED light source providing maximum accuracy in all types of weather.

Straightforward maintenance and no need for manual realignments.

Optional present weather reporting that provides additional insight into airport weather conditions.

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.

Transmissometer measurement resembles human observations. It directly measures light attenuation (reduction in light) between the transmitter and receiver and thus is independent of the type of visibility reducing particles present, ensuring the best accuracy in the most crucial low-visibility situations. Specifically designed for airport environments, the LT31 provides precise data under any conditions, including dust and sand.

With LT31, airports have the necessary information to ensure safety of runway operations while maximizing capacity during all types of weather.

Simplified compliance

As part of an RVR system, the LT31 enables airports to meet relevant ICAO requirements, as well as crucial national/local certifications for CAT I to CAT III airports.

The best data for decisions and peace of mind

The LT31 provides the highest level of precision possible for RVR – especially in critical, low-visibility situations – regardless of the phenomena causing reduced visibility. With LT31, you can fully satisfy ICAO desirable accuracy for RVR.

Fail-safe operation

By their nature, transmissometers will report lower-than-actual visibility if there is a disturbance to the measurement. This contrasts with forward scatter sensors, which can report higher-than actual visibility. Referred to as fail-safe operations, this important advantage of transmissometer ensures safety.

