

## Vaisala Ground Cast Sensor

Provides key road weather measurements from any location, easily and affordably



### Key benefits

#### Densify your observation network

The easy way to get measurements from critical network locations that have not been practical or affordable to cover. Target treatments, avoid unnecessary material use, validate treatment success, and gain insight into protection levels on your network.

#### Install anywhere quickly

No cables or powering required with built-in wireless communication and battery. Get up and running in 30 minutes and operate maintenance free up to 4 years.

#### Accurate observations for better pavement forecasts

Road surface temperatures can vary across a network, and local observations are critical for improving pavement forecasts. The embedded sensor measures real surface temperature plus road temperatures from different depths.

#### Hassle-free subscription service

Vaisala provides the sensors, monitors the network and handles data communications, leaving you free to focus on other tasks.

#### Easily access data, your way

Use with Wx Horizon or bring the data into your own system with the Wx Horizon API.

**Winter road maintenance professionals need to monitor road conditions and predict surface freezing risk across the road network to make proactive treatment decisions. These decisions should be data-driven and based on local weather observations.**

Whether you are just getting started or looking to cover some of the blind spots in your current observation network, the Vaisala Ground Cast Sensor provides the road weather measurements that matter the most.

The Ground Cast Sensor measures road surface temperature and the amount of residual treatment material, providing you with reference grade observations and location-specific forecasts. This helps you proactively keep roads safe by targeting treatments and validating effectiveness in real time. With no power or other infrastructure required, you can install it virtually anywhere with NB IoT connectivity. Automatically get access to Ground Cast Sensor observations through Vaisala Wx Horizon or integrate the Wx Horizon API with your own system.



### Multilevel temperature measurement:

Road temperature measurement from 0cm, -6cm and -30cm in the ground. Specifically designed to improve pavement forecasts.

### Treatment material measurement:

Measure the residual treatment amount to facilitate targeted treatments and to validate the effectiveness, avoiding unnecessary use of materials.

### Simple installation:

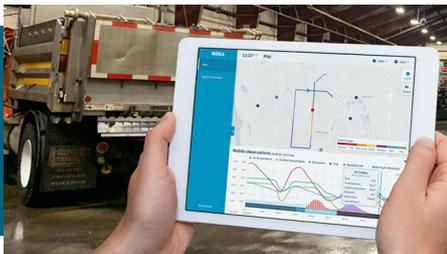
No infrastructure or cables needed thanks to a built-in battery and wireless NB-IoT communications.

### Accurate data:

Road surface temperature accuracy of  $\pm 0.2^\circ$

### Observations and enhanced point forecasts:

Combines two industry-leading modeling systems and provides point forecasts enhanced with local observations.



Vaisala Wx Horizon Premium is a weather hazard impact portal that delivers insights to current and future road conditions. The fusion of accurate measurements with industry-leading weather forecasting and best-in-class road weather model delivers actionable information for specific use in transportation.

## Why Vaisala?

### The industry's most dependable road weather technology

Vaisala road weather technology solutions lead the industry thanks to superior data qualities and a continuing commitment to innovation and research and development. They are built on 85 years of weather measurement experience and solutions, trusted in over 170 countries from the north pole to the south pole and even on Mars.

### Insight every day

The combined power of our weather and environmental solutions provide dependable intelligence people can confidently act on to make better decisions. With Vaisala, you can count on our 360 degree solutions that are extensively put to the test across the world and proven to consistently provide superior performance.

# VAISALA

[vaisala.com/groundcastsensor](https://vaisala.com/groundcastsensor)



Scan the code for more information

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