

Vaisala Mobile Detector MD30

Product Spotlight

See real-time road conditions anywhere
on your network

The Vaisala Mobile Detector MD30 is the first device designed specifically for snow plows to accurately collect and transmit data on road surface state, grip, layer thicknesses, and surface temperature along the route.

MD30 helps fill road condition gaps in between stationary weather stations so you can see conditions across the entire network. Enhanced decision-making drives optimal material usage and resource deployments, resulting in cost savings and decreased environmental impact.



Key benefits

Equipped with a compact, multiparameter sensor for increased accuracy.

MD30 features all key measurements, such as surface state, grip, layer thicknesses, and surface temperature.

While designed for snowplows, MD30 is suitable for any vehicle.

Based on Vaisala's market-leading DSC technology for enhanced features and accuracy.

MD30 can be combined with video and photo data and visualized online.

Why Vaisala?

Vaisala's weather and environmental technologies take every measure for unrivaled road network awareness – keeping roadways safe and efficient in any season.

Our instruments and intelligence are built on 85+ years of innovation and are known as the gold standard for precision and reliability. We understand how accurate data and insights do even more by driving sustainable road operations and climate action. Our holistic approach provides customers with end-to-end simplicity, valuable partnership, and a comprehensive portfolio that is constantly evolving.

As recognized experts in transportation, we continue to channel our curiosity into new ways of making roadways safer and more efficient than ever.

MD30 attaches to the front of a snow plow or other vehicle; automated data collection from the start allows for ease of use while drivers concentrate on the road. This real-time data helps both drivers and supervisors make quick decisions to improve road conditions and avoid time-consuming rework.

For supervisors

- What's happening between my weather stations? Are conditions changing?
- Does the current pavement forecast reflect the state of my roads?
- Are we using the right material types and amounts for each road segment?
- Are the trucks where they should be, clearing the most impacted and important routes first?

For plow operators

- Is there black ice or moisture? How thick is the layer, and is the road slippery?
- Is the pavement temperature falling, and do I need to pre-treat?
- Should I apply more or less material?
- What's left on the road after my blade has passed?

Optimize treatment with dynamic spreading

MD30 is the perfect instrument to integrate into dynamic spreader control systems, which determine the optimal spreading rate for each location based on real-time MD30 data. This empowers agencies to maximize resources while minimizing environmental impacts.

Part of an integrated approach to modern winter maintenance

Vaisala Wx Horizon, part of our Xweather family of subscription based products, integrates road weather data from all your road weather stations, IoT sensors and mobile sensors – giving you actionable insights into current and future conditions across the network. The fusion of real-time sensor data with our industry-leading road weather modeling and unmatched forecasting accuracy improves winter maintenance decisions.

