# **VAISALA**

### Vaisala Mobile Detector MD30

### 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, and surface temperature along the route.

The 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.

The 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.

### **Key Benefits**

#### See exactly what's on the road

Eliminates guesswork on changing weather conditions by transforming snow plows into weather stations and providing real-time data to supervisors and drivers alike.

# Rely on hardware built for snow plows

Designed to withstand heavy vehicle vibration and prevent water ingress. Patent-pending hood protects the lens from snow and road spray and easily removes for cleaning.

# Go beyond surface temperature

Transmits real-time data on grip and road state, layer thicknesses of water/ice/snow, road and air temperature, relative humidity and dew point.

# Get started quickly and affordably

Compact size enables easy installation with many options, and affordability enables widescale fleet deployments.

# Integrate for decision support & spreader control

Ready for use as part of a decision support system such as Vaisala Wx Horizon or your current spreader control system.

### Vaisala MD30 at a glance

#### **Key features**

- Compact, multiparameter sensor
- All key measurements, such as surface state, grip, and surface temperature
- Designed for snow plows, suitable for any vehicle

- Based on Vaisala's marketleading DSC technology
- Can be combined with video and photo data and visualized online



#### Real-time answers to challenging questions

#### For winter road maintenance supervisors

- What's happening between my weather stations?
- 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?
- Are any operational adjustments necessary due to quickly changing conditions?

#### For plow operators

- Is there black ice or moisture on this road? How thick is the layer and does it make the road slippery?
- Is the pavement temperature falling and do I need to treat the road to prevent a potential icy situation?
- Should I be applying more or less material?
- What's left on the road after my blade has passed?

### Why Vaisala?

Vaisala's weather and environmental technologies enable unrivaled road network awareness — keeping roadways safe and efficient in any season.

As the gold standard for precision and reliability, Vaisala's holistic approach provides customers with end-to-end simplicity, valuable partnership, and a comprehensive portfolio of solutions that are constantly evolving. Our 85+ years of innovation are reflected in our guiding principles for roads:

#### 1. Move ahead

Only Vaisala provides data of unrivaled depth and breadth while synthesizing it into objective decision support — so everyone can keep moving toward better, more insightful ways of operating.

#### 2. Mobility and beyond

We deliver the right insights to the right people at the right time, enabling a wide range of stakeholders to act with confidence and achieve a comprehensive understanding of their road networks and the vehicles on them — creating better, safer outcomes for all.

#### 3. The innovators

As a recognized industry expert, we continuously apply our knowledge and experience to create next-generation solutions that advance the industry; enabling stakeholders to innovate and optimize road networks like never before.

#### 4. See, understand, decide

Vaisala gives users rich data intelligence that improves real-time decision-making as well as observation enhanced forecasting to enable strategic planning. With a better, fuller understanding of their road network, users can do their jobs more decisively and effectively than ever.



