# **VAISALA**

### Remote road sensors DSC211 and DST111

### Reliable surface state and temperature data for safety and efficiency



# World class road condition data — without invasive installation and maintenance.

Around the globe, various organizations have adopted Vaisala's rugged, non-invasive road condition sensors. With simple installations that avoid traditional costs and complexities, the DSC211 and DST111 sensors provide accurate data, quick time to value, and improved decision-making.

The DSC211 Remote Surface State Sensor series uses proven laser technology to identify water, ice, slush, snow, frost, and determine grip — even with heavy traffic. The DST111 Remote Surface Temperature Sensor measures infrared radiation day and night, applying intelligence signal processing for outstanding accuracy.

With these technologies, there's no need to stop traffic or risk worker safety with disruptive installations. They can be mounted to poles, lamp columns, or overhead structures. And, while the sensors can be used individually, the best data results are achieved by combining DST111 and DSC211 with other sensors via a Vaisala weather station.



### **Key Benefits**

## Safer roads, better maintenance

These sensors enable you to deliver on your core mission of improving safety through more effective maintenance.

# Cost efficiency and time to value

The sensors' simplicity, ruggedness, and ease of use add value beyond the data they provide — especially for agencies under budgetary pressures.

## Accurate, data-driven decisions

With outstanding uptime and data availability, the sensors provide 24/7 road intelligence in all weather conditions — improving efficiency and decision-making.

### Remote road state sensors at a glance

#### **Applications**

- Remote road condition measurement
- Road maintenance decisionmaking and prioritization
- Long-term roadway assessment/analysis from multiple reference points

#### Advantages over embedded sensors

- Versatile, with non-invasive installation
- Sensitivity for early detection of ice crystals before they impact traction
- Easy-to-read grip data
- No damage from premature pavement failure, overlays, snow plows, or pooling
- Optimized maintenance with help of lens dirt indication

#### **Key features**

Fast, non-invasive installation The sensors can be mounted on existing structures, with a wide installation height range. They require little or no traffic disruption, drilling, or new construction.

Flexibility and ease of integration When used in combination, the sensors provide a complete picture of road weather conditions. They can also be easily integrated with existing weather systems, such as the Vaisala Road Weather Station.

Dependability over long service lives. With automatic calibration and highly resilient designs, the sensors require little or no maintenance — unlike traditional sensors.

### Why Vaisala?

# The industry's most dependable technology

Vaisala is the world leader in producing road state sensors that perform in harsh environments. Cities, state highway organizations, and other major road maintenance companies have trusted Vaisala sensor technology for decades.

#### Support to count on

Look to Vaisala for dependable support, training, and project management so you can get the most from your equipment. With decades of experience providing the best technologies and the finest support, Vaisala's philosophy of partnership is unmatched in the industry.



