

## Vaisala Surface Patrol Pavement Temperature Sensor with Display DSP100 Series



### Benefits

- Mobile sensor provides pavement data for your entire route
- Real-time pavement and air temperature readings
- Inexpensive compared to other pavement monitoring methods

### Features

- Measures both air and pavement temperatures
- Easy-to-read, dash-mounted digital display
- Patented cone design to protect sensor lens
- Separate air sensor for improved accuracy
- Quick and easy to install
- Unit can be calibrated in the field as opposed to returning it to the manufacturer
- Integrates with other vehicle equipment such as spreaders or distance measuring instruments
- Optional RS-232 output to connect to a computer or analog output for other applications

The Vaisala Surface Patrol Pavement Temperature Sensor with Display DSP100 Series is a mobile temperature sensor used to detect possible freezing temperatures on the pavement. It features a non-contact infrared sensor for measuring pavement temperature, and also measures air temperature. The easy-to-use DSP100 is valuable for large agencies, such as Departments of Transportation, all the way down to smaller companies with only a few trucks.

The DSP100 is mounted outside your vehicle and continuously monitors road surface temperatures, providing instant feedback on road

surface conditions. The DSP100 has a separate air temperature sensor and cabling so that it can be placed away from direct sunlight for accurate readings. The data retrieved from the DSP100 is accurate and real-time, making it a reliable method for collecting pavement information. The DSP100 can be calibrated in the field, ensuring you are always getting the most accurate readings. In addition, the pavement probe features a cone design to protect the sensor from spray and winter elements that can decrease the accuracy of the readings.

# Technical data

## General

Accuracy	±0.28 °C (0.5 °F) at 0 °C (32 °F)
Shock	50 Gs
Vibration	10 Gs in any axis
Input Voltage	12 or 24 VDC unregulated
Field Calibration	Adjustable ±17.5 °C (5.0 °F) at 0 °C (32 °F)
Optics	Precision crystal (germanium lens)
Air Temperature Cable Length	5.5 meters (18 feet) standard
Operating Air Temperature	-40 °C to +71.1 °C (-40 °F to +160 °F)
Dual Digital Meter	High brightness red LED, showing both air and pavement temperature
RF Hardened	Withstands external radio frequency effects caused by mobile radios
Digital Output*	RS-232; ASCII output
Analog Output*	4 to 20 mA; 1 to 5 V

CE COMPLIANCE  
Directive 2004/104/EC

\*Optional

## Applications

- Winter maintenance operations (snow plows, supervisor vehicles, etc.)
- Other fleet vehicles to increase your AVL network

## DSP100 Series

PRODUCT

DSP110  
DSP111  
DSP112  
DSP113  
DSP114



# VAISALA

For more information, visit  
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