

# Surface Patrol®

Mobile Infrared Pavement Temperature Sensor

## Overview

The Surface Patrol 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 Surface Patrol is valuable for large agencies, such as Departments of Transportation, all the way down to smaller companies with only a few trucks.

The Surface Patrol pavement sensor is mounted outside your vehicle and continuously monitors road surface temperatures, providing instant feedback on road surface conditions. The Surface Patrol 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 Surface Patrol is accurate and real-time, making it a reliable method for collecting pavement information.

The Surface Patrol 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.

## Benefits

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

## Applications

- ▶ Departments of Transportation/Ministries of Transportation
- ▶ City, County, and Township street maintenance departments
- ▶ Airport ground equipment
- ▶ Snow plows and snow removal contractors
- ▶ Other fleet vehicles to increase your AVL network



## 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



## Key Specifications

Accuracy	±0.5°F (0.28°C) at 32°F (0°C)
Shock	50 Gs
Vibration	10 Gs in any axis
Input Voltage	12 or 24 VDC unregulated
Field Calibration	Adjustable ±5.0°F (17.5°C) at 32°F (0°C)
Optics	Precision crystal (germanium lens)
Air Temperature Cable Length	18 feet (5.5 meters) standard
Operating Air Temperature	-40°F to +160°F (-40°C to +71.1°C)
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 Compliant	Directive 2004/104/EC

\*Optional



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