

MODEL 5435

Mobile IceSight

Surface Condition Sensor

- Real-Time Surface Conditions from Moving Vehicle
- Includes Surface Temperature, Air Temperature and Relative Humidity
- Simple Integration with Existing AVL Systems
- Data Dash Display from any Web Browser



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DESCRIPTION:

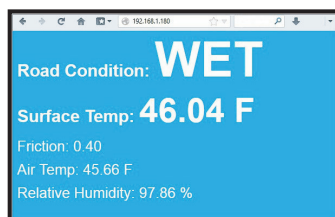
The Model 5435 Mobile IceSight is a remote mobile surface condition sensor that provides real-time surface condition and atmospheric information from a moving vehicle. The sensor's standard, open-architecture data output includes air temperature, relative humidity, surface temperature, six distinct surface indications and a surface friction coefficient.

The mobile IceSight was developed for winter maintenance professionals who demand up to the second information about their roads and environment. The compact and rugged design can withstand the harsh environments of winter maintenance vehicles that makes it ideal for fleet management. Some use cases include:

- Real-time surface and atmospheric data when and where you need it
- Integrate into existing RWIS network to fill in gaps between fixed stations
- Integrate into existing AVL and MDSS systems with the sensors open-architecture data output
- Flexible mounting solutions with small form factor and 3 to 15 ft measurement range
- Thermal mapping capabilities with the 5437 MPU and Glance subscription
- Tool for vehicle fleet route optimization



The sensor uses laser and infrared electro-optical technology to detect hazardous ice, snow and wet conditions and surface grip without embedding any sensors in the pavement. Surface states reported include dry, damp, wet, slush, snow and ice indications. Surface grip is reported as a friction coefficient on a scale of 0 (worst) to 1 (best) and in simple terms to the motorist as good, fair and poor. Road temperature is measured by a highly accurate non-contact infrared temperature sensor. Air temperature and relative humidity are measured separate from the main sensor housing to allow for accurate readings with quick response time to changing atmospheric conditions.



Integrated Wi-Fi, as a standard, is used to provide the user a web based data dash display compatible with any standard web browser on a computer or smart device. The dash display background colors change based on surface condition, giving the user instant feedback without needing to look directly at the display. In addition to the data display, a java applet is provided for sensor auto calibration and data logging from a java enabled computer.

When coupled with the Model 5437 Mobile Processing Unit (MPU) and Glance subscription the Mobile IceSight provides an AVL solution with a comprehensive data display and management tool.

02-5435-00(C)

Environmental Monitoring Solutions

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MODEL 5435

Specifications and Ordering Guide



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SPECIFICATIONS:

Power	10-14 VDC
Power Consumption	5 Watt (max), 4.2 Watt (typical)
Operating Air Temp	-40°F to 149°F (-40°C to 65°C)
Range	3 to 15 feet (1 to 4.5 meters)
Measurement Area	6" Diameter at 5 feet
Elevation Angle	30° to 60°, 45° optimal
Sensitivity	0.01" ice/water, 0.05" snow
Surface	Asphalt or Concrete
Surface States	Dry, Damp, Wet, Slush, Snow, Ice
Surface Grip	0 to 1.0 and Classified Surface Grip (good, fair, poor)
Surface Temperature	±0.5°C at 0°C, ±1°C at -40° to 85°C
Air Temperature	±0.2°C at 0°C, ±0.5°C at -40° to 65°C
Relative Humidity	±1.8% at 10% to 90% RH, ±3% at 0% to 10% and 90% to 100%
Communication	RS-232, RS-485 and Wi-Fi (standard)
Safety	Eye Safe Class 1 Laser
Cable Length	15 feet (4.5 meters)
Mounting	¼"-20 Studs Spaced 2"
Dimensions	11.5" x 4.0" x 2.3"
Weight	3 Pounds
Shipping Weight	5 Pounds
Warranty	1 year, extendible year by year

ORDERING GUIDE:

Model 5435-00	Mobile IceSight with Wi-Fi, RS-232, RS-485, 15 ft cable
Model 5435-70	Angle mounting bracket (required)
Model 5435-71	Mobile IceSight 2" hitch mount
Model 5435-80	Mobile IceSight annual service plan (Ship-in one time per year, clean, refurbish and calibrate. Includes all necessary parts, including laser and optical parts, if needed. Warranty terms apply.)
Model 5435-90	Mobile IceSight replacement calibration material

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