Smart Systems for Transportation Safety

IceSight-2020E

Remote Road Surface Condition Sensor

Features

- Remote surface sensing of ice, snow, wet, damp, and dry conditions
- Optical head designed for easy cleaning
- Sensor accuracy immune to passing traffic
- Surface and Air Temperature
- Internet compatible communications – view data from any web browser
- Flexible data streaming integrate with an RWIS
- Low power requirements– may be solar powered
- Easy Installation
- Rugged all-weather design



Overview

IceSight-2020E is an electro-optical sensor which reports the surface weather condition of roadways. IceSight will detect Ice, Snow, or Water without ever having to touch the surface it monitors.

The spectral differences of the surface road conditions are used to determine the surface state. The spectral data is analyzed in real-time and a road condition is reported.

IceSight's high sensitivity enables it to warn road management personnel immediately when snow or ice begins to form, allowing them to take action before roads become hazardous.

Easy pole-mount installation of the IceSight eliminates the need for penetrating the roadway as other surface sensors require.

This model is typically specified where multiple units are required to monitor many points on a bridge or highway, and the most economical solution required.

Applications

- Intersection Control
- Dynamic message sign control
- Automatic spray anti-icing
- Traffic/weather monitoring
- Hazardous roads/bridges
- Aircraft runways and taxiways
- Parking lots

Output

- Surface Condition: ice/snow/slush/wet/damp/dry
- Surface and Air temperature

Options

- Digital output for peripheral control (i.e. dynamic msg sign)
- Low Visibility or Fog conditions
- Data Logger/Transmitter

Specifications

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Sensor Probe		17.75" x 5.25"
Weight		8 lb
Power Input		12 VDC
Max Power		5 Watts
Operating Air Temp		-40°F to +150°F
Range		50ft (15m)
Spot Size		36" Dia. @ 30ft
Elevation Angle		30° to 85°
Sensitivity		±1°F (ambient) 0.01" ice/water 0.05" snow
Surface		Asphalt Concrete
Cable length		25ft
Communicatio	n	Ethernet RS-232 RS-485
Safety	Eye Safe Class 1 Laser	
Diagnostics		Start up BIT