



# IceSight-2020E

## Road Surface Condition Sensor



### Features

- Remote surface sensing of ice, snow, wet, damp, and dry conditions
- Optical head designed for easy cleaning
- Humidity Sensor
- Air and Surface 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 used to detect hazardous road conditions such as ice, snow, and water. The spectral differences of the road conditions are used to determine the surface state. The spectral data is analyzed in real-time and a road condition is reported.

The 2020-E model is the most basic package of the IceSight series. This model is ideal where multiple units are required to monitor many points on a bridge or highway, and the most economical solution is required.

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

IceSight's high sensitivity provides early warning alerts to personnel when snow or ice begins to form, allowing them to take action before roads become hazardous.

### 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 message sign)
- Low visibility or fog conditions
- Data Logger/Transmitter

### Specifications

Power.....	12 VDC
Power Consumption.....	5 Watts
Operating Air Temp.....	-40° C to 65° C
Range.....	50ft (15m)
Spot Size.....	36" Dia. @ 30ft
Elevation Angle.....	30° to 85°
Sensitivity.....	0.01" ice/water 0.05" snow
Surface.....	Asphalt/Concrete
Surface Temp....	±0.5°C@0°C, ±1°C@-40° to 85°C
Air Temp.....	±0.2°C@0°C, ±0.5°C@-40° to 65°C
Relative Humidity.....	±1.8%@10% to 90%RH, ±3%@0% to 10% and 90% to 100%
Communication.....	RS-232,RS-485,Ethernet, WiFi (option)
Cable Length.....	30ft
Dimensions.....	17.75" x 5.25"
Weight.....	8 lb
Safety.....	Eye Safe Class 1 Laser
Diagnostics.....	Start up BIT