

Innovative Dynamics, Inc. Smart Systems for Transportation Safety

# IceSight 2020-E

Remote Road Surface Condition Sensor



## Features

- Remote surface sensing of ice, snow, wet, damp, and dry conditions
- Flush optical head assembly for easy cleaning
- Sensor accuracy immune to passing traffic
- 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 2020-E* 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 enables it to warn road management personnel immediately 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

#### **Data Output**

- Surface condition:
- ice/snow/wet/damp/dry
- Air temperature

#### Options

- Digital outputs for peripheral control (i.e. dynamic msg sign)
- Low visibility or fog conditions
- Data Logger/transmitter

#### Specifications

Dim:	12.0"x 4.0"OD
Weight :	4.5 lb
Power Input:	12 VDC
Max Power:	5 Watts
Oper. Temp.:	-40°F to 150°F
Range:	50 ft (15 m)
Area:	36"Dia. @ 30 ft
Elev. Angle:	30° to 90°
Sensitivity:	±1°F (ambient)
	0.01" ice/ water
	0.05" snow
Surface:	Asphalt or Concrete
Comm:	RS485, Ethernet
Safety:	Eye Safe Class 1
Diagnostics:	Start up BIT, digital
	test signal