

Intelligent Traffic Solutions

Non-Intrusive Overhead Mounting Road Surface Sensor

ORT/SD-METEOS 251

Ortana road sensor use optical measuring principles. Without a need to install the embedded sensors, these non-intrusive multi-sensor-systems have integrated optical technology to identify all road and runway conditions.

- Fully solid state design (No mechanical part or conventional lamps)
- Fully based on IR LED and sensor technology
- Long MTBF and life time with minimum maintenance
- Measurement of surface conditions such as wetness, ice, snow or frost
- Fully integrated surface temperature measurement (pyrometer)
- Can be mounted exist poles and gantry
- Can be integrated to ORTANA data logger METEOS-901



Technical Specifications

Mechanical Dimension : 265 (h) mm x 100 (w) mm x 181 (d) mm

Weight : 1.5 kg

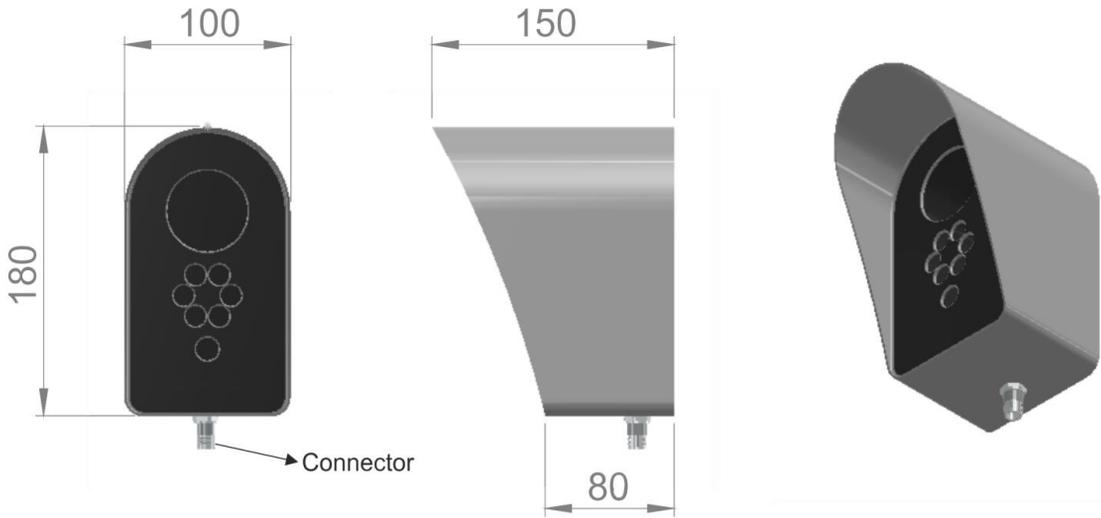
Operating Temperature : -40 to +85°C

Operating Relative Humidity : <95% Relative Humidity Non-condensing

Operating Voltage : 24 VDC

Protection Class : IP65

Power Consumption : 5VA (heater is off), 30VA (heater is on)



Sensor Specifications

Surface Conditions : Dry, Damp, Wet, Snow, Ice

Measurement Principle : NIR Optical

Water Thickness Measurement Range : 0...2mm

Snow Thickness Measurement Range : 0...10mm

Measurement Resolution : 0.01

Surface Temperature Measurement : Pyrometer

Surface Temperature Range : -40...100°C ($\pm 1.5^\circ\text{C}$ accuracy)

IR Source Safety Class : Class 1

Measurement Surface Diameter : Max 1500mm at 10m Height with 45° aiming

Communication : RS-485 Semi Duplex Serial Communication