

Intelligent Traffic Solutions

Non-Intrusive Overhead Mounting Road Surface Sensor

METEOS 251

ORT/SD-METEOS 251



ortana

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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 existing poles and gantries
- Can be integrated to ORTANA data logger METEOS-901



Technical Specifications

Mechanical Dimension : 225 (h) mm x 130 (w) mm x 170 (d) mm

Weight : 1.5 kg

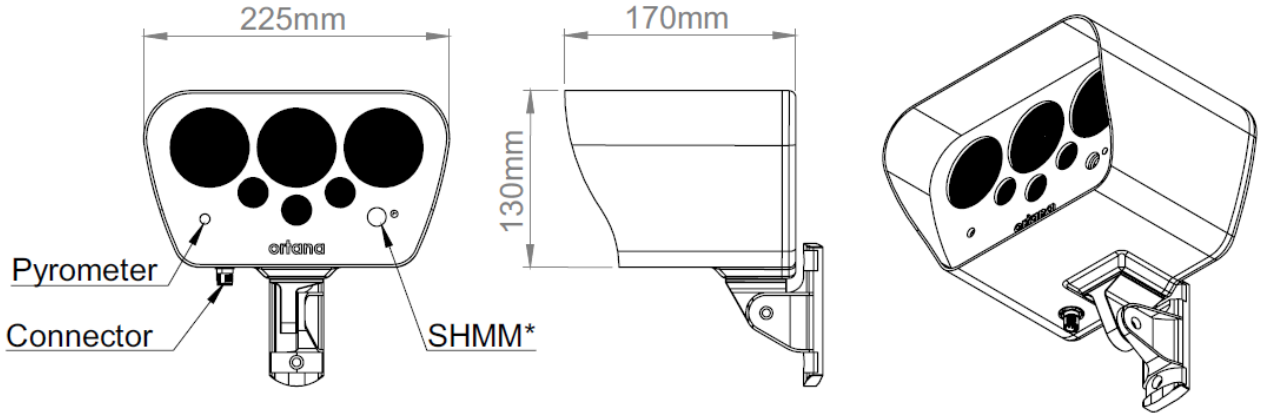
Operating Temperature : -40 to +85°C

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

Operating Voltage : 24 VDC

Protection Class : IP65

Power Consumption : Nominal 5W (max 25W with heater on)



Sensor Specifications

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

Measurement Principle : Optical

Surface Thickness Meas. Accuracy : $\pm 0.1\text{mm}$ for 600 μm to 4mm, $\pm 0.5\text{mm}$ for >4mm to several meters

Surface Temperature Meas. Principle : Pyrometer

Surface Temperature Meas. Range : -40...100°C (0.8 °C accuracy)

IR Source Safety Class : Class 1

Measurement Surface Diameter : ~1 m at 10 m height

Communication : RS-485 Semi Duplex Serial Communication

*SHMM: Snow Height Measurement Module

-Designs and specifications are subject to change without notice by ORTANA as the products are continuously in development.