# ortana

Intelligent Traffic Solutions

# CANTILEVER DOPPLER RADAR SPEED WARNING SYTEM

#### **ORTANA**

Cantilever Doppler Radar Speed Warning System Display's are EN12966 compliant and certificated. This model Visual Screen is presented in full matrix and mono color pixels. The optical norms are EN12966 Optical Classes L3, R2, C2, B2, T1/T2/T3, P3 and certificated.

- Monochrome, Full Matrix Amber LED Display
- Extended life time due to high optical performance with low LED current drive, low power consumption
- Very Low LED Drive Currents saving energy, reducing self heating and increasing LED life time

  K-Band Doppler Radar
- %1 Speed Measurement Error Rate
- DSP (Digital Signal Processing) Technology
- Automatic luminous intensity setting in 255 levels between 0% to 100%
- 1200 (w) x 1440 (h) mm Net Visual Area
- 1400 (w) x 1640 (h) mm Mechanical Area
- Approved 15 years life time including all equipment (low maintenance requirement)
- High Contrast Ratio (EN12966 L3/R2)
- Wide Viewing Angle EN128966 B2 (15deg)
- Secondary Front Optical Lenses with dust accumulation proof design
- High Mechanical Protection (IP66)
- Maintenance Free Aluminum Housing
- Wide Operating Temperature Range (EN12966 T1/T2/T3)









## **Optical Specifications**

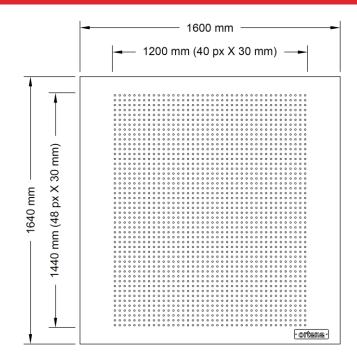
Display Type : Monochrome Full Graphical LED Display

Lighting Elements : Amber TH LED

Graphical Definition : 40 (w) x 48 (h) pixels

Net Visual Area : 1200 (w) x 1440 (h) mm

Pixel Pitch : 30 mm



### **Electronics Specifications**

Luminous Intensity Setting : Pre-selected 10 levels automatic (out of possible 255 levels)

Lighting Elements : 32 Bit Microcontroller

Graphical Definition : Solar System or 230 VAC

Relative Humidity : Betwn. 0% -100%

Temperature Range : EN12966 Class T1/ T2/ T3 (-40°C to +60°C and extended +80°C)

# **Mechanical Specifications**

Housing : Aluminum Housing

Protection Class : IP66 (EN12966 Class P3)

Front Face : Optical Polycarbonate Lenses

Mechanical Resistance : WL6, TDB1 (EN12899)

Mechanical Dimensions : 1400 (w) x 1640 (h) mm



#### **Standards**

Ortana Cantilever Doppler Radar Speed Warning System's meet and exceed all international standards for optical, electrical, mechanical and resistance requirements. All Ortana Cantilever Doppler Radar Speed Warning System's are certified according to EN12966, Bast, ISO9001, ISO14001, ISO27001 Standards.

- AASHTO and AWS certification criteria
- IEC60950-1, HD.384.4, HD.638, NEN1010 safety standards
- IEC60529 for Housing Protection

#### **Certificates**

- Vibration Test in accordance with EN 60068-2-64
- Corrosion Test in accordance with EN ISO 9227
- Housing Protection in accordance with EN 60529
- Temperature Test

Cold EN60068-2-1

Dry Heat IEC 60068-2-2

Damp Heat Cycling EN 60068-2-30

Solar Radiation EN 60068-2-5

Change of Temperature IEC 60068-2-14

Electrical Safety according to EC 60950-1, HD384, HD638

EMC Testing

EN 55022 Emission

EN 61000-3-2 Harmonic current emissions

EN 61000-3-3 Limitation of voltage fluctuations

EN 50293 Product group immunity standard

EN 61000-4-2 Electrostatic discharge (ESD) immunity

EN61000-4-3 Radiated Electro-Magnetic field immunity

ENV 50204 Digital radio telephones immunity

EN 61000-4-4 Electrical fast transient (EFT) immunity

EN 61000-4-5 Surge transient immunity

EN 61000-4-6 Conducted Radio-Frequency disturbances immunity

EN 610000-4-11 Immunity to voltage dips and short interrupts

