

# ortana

Railway

## RAILWAY SIGNAL LAMP

Railway signaling systems are used for railway traffic management in a safe manner and to make railways more efficient.

Ortana Railway Traffic Signal Lamp produced with innovative optical design by Ortana with state of Art Interface Technology which supports various interface standards available. Rail LED Signal Lamp is suitable for all applications that require high intensity signals and also low-cost and maintenance-free solution.



- Red, Green, Yellow, Blue, White Color
- Options Light Intensity Dimming Feature
- 20W Power Consumption for per lamp (Normal Mode)
- 9W Power Consumption for per lamp (Dim Mode)
- Very Low Maintenance Cost
- Minimum 15 years of Lifetime
- Very High MTBF
- Approved and certificated according to SIL-4 Environmental System
- Digital I/O Control (Optional)



Ortana Railway Traffic Signal Lamp Housing is manufactured with corrosion-resistant aluminum. The surface of the products are painted with UV-resistant black paint that does not fade in the sunlight. Product housing is fully resistant against water and dust ingress. Ortana Railway Traffic Signal Lamp can be freely mounted on a background plate with either a fixed or an adjustable mounting. Electrically, power and data connections of the product are connected via an external high quality industrial connector which is water/dust proof and resistant to the irregular vibrations that may occur around the railway, and are located on the back of signal light.

Ortana Railway Traffic Signal Lamps are compatible with the German and British standards.

Ortana Railway Traffic Signal Lamps are SIL-4 certified.



## General Specifications

Radiating Element	Light Emitting Diode
Luminous	Control Remote Light Intensity Setting Feature
Earthing by	M4 screw

## RAMS Characteristics

Standard Used	EN50126:2017
MTBFF	6,332E+08
THR	1,579E-09

## Electrical Specifications

Control Unit	Microcontroller
Radiation Intensity	Light Intensity Adjustment Feature
Power Requirement	12 VAC $\pm$ 10%, 50-60 Hz (Normal mod) 8 VAC $\pm$ 10%, 50-60 Hz (Dim mod)
Power Consumption (per lamp)	20W (Normal mod) 9W (Dim mod)

## Optical Specifications (per lamp)

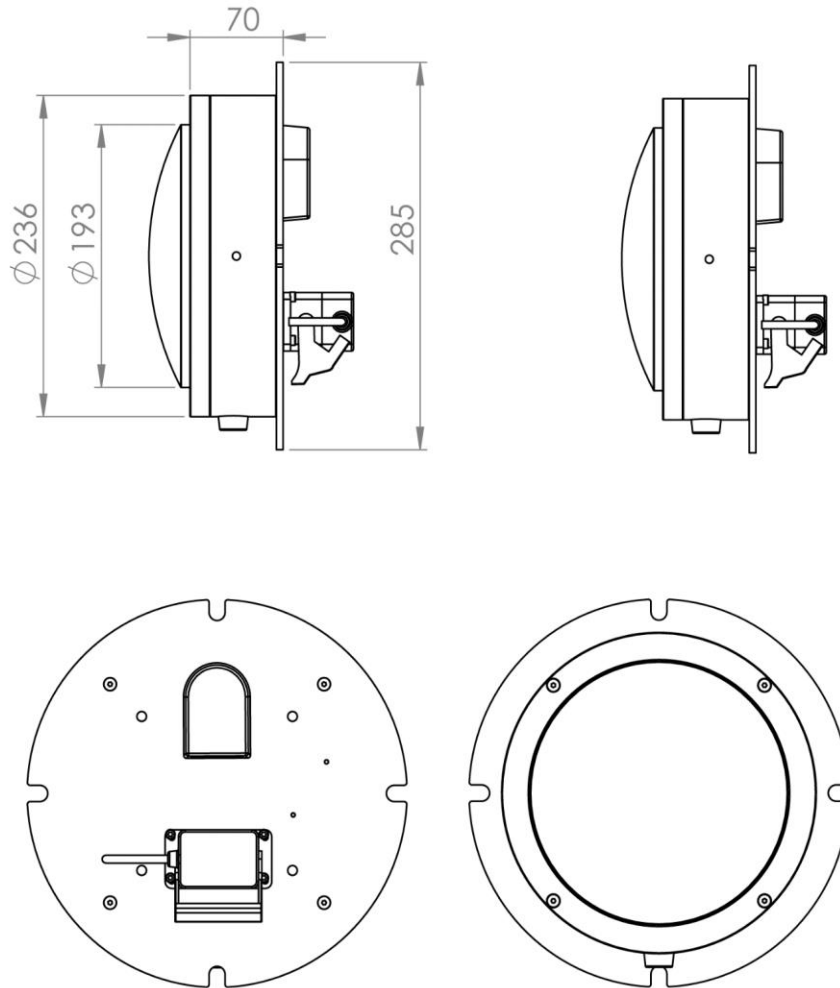
Net Visual Area	$\varnothing$ 210 mm
Unit Number of LEDs	61
LED's Coordinates (Red, Green, Blue; White)	In accordance with DIN6163/part 4:2011 / BS1376:1974
LED Technology	AllInGap
LED Lifetime	100.000 hours (averaged)

## Radiant Intensity



<b>ORTANA RTSL</b> <b>Model Name</b>	<b>Intensity*</b> <b>Maximum Intensity(cd)</b>	<b>Intensity*</b> <b>Luminous Intensity (cd)</b>
RTSL-R	390	50
RTSLF-R (with Fresnel lens)	3.680	500
RTSL-G	380	50
RTSLF-G (with Fresnel lens)	5.100	720
RTSL-Y	420	60
RTSLF-Y (with Fresnel lens)	4.000	600
RTSL-W	650	90
RTSLF-W (with Fresnel lens)	6.350	900
RTSL-B	140	20
RTSLF-B (with Fresnel lens)	1.850	260

## Mechanical Specifications



Housing

Aluminum

Isolation

IP65 (EN 60529)

Front Face

Polycarbonate Optical Lenses  
(Fresnel lenses is added to the structure for the long distance version)

Paint

Color UV Resistant Paint

Mechanical Dimensions

$\phi 285 \times 100$  mm

Operating Temperature Range

-40°C / + 70°C

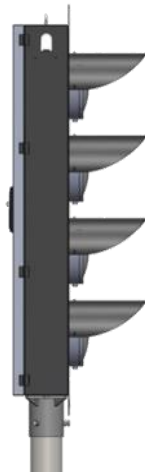
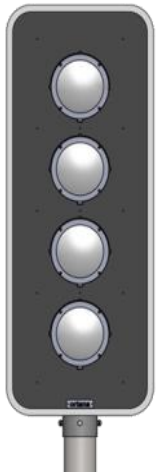
Operating Humidity Range

0% - 100% Relative Humidity

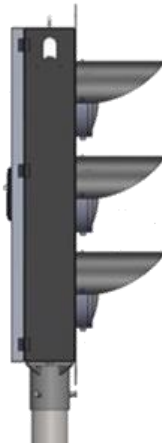
High Mechanical Resistance

WL9 (EN 12899)

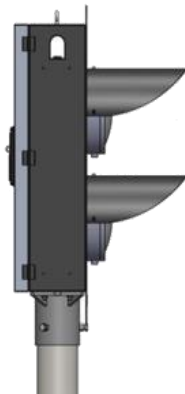
## RAILWAY SIGNAL LAMPS



4 ASPECT RAIL LED



3 ASPECT RAIL LED



2 ASPECT RAIL LED



3 ASPECT DWARF  
SIGNAL RAIL LED



## SİNCAN FACTORY

Ahi Evran Mahallesi  
Oğuz Caddesi No: 30/1  
ASO 1. OSB  
06935 Sincan ANKARA / TURKEY



## TEMLİ FACTORY

ASO 2. OSB Eskişehir Yolu  
42.km 2017. Cad  
06935 Sincan ANKARA / TÜRKİYE



## PROJECT OFFICE

Tepe Prime  
Eskişehir Yolu 9. km  
No:266 B Blok, Kat 14, No: 106-107  
06800 ANKARA / TÜRKİYE



## ELECTRONICAL R&D OFFICE

ODTÜ Bilişim ve Inovasyon merkezi  
Mustafa Kemal Mahallesi, C Blok, Kat 1  
06510 Çankaya/Ankara/ TÜRKİYE



## ORTANA ME FZE

P.O.16111  
RAS AL KHAIMAH  
UNITED ARAB EMIRATES



## ORTANA NETHERLANDS BV

KABELWEG 37  
1014 BA AMSTERDAM  
THE NETHERLANDS

## Ortana Elektronik Yazılım Taahhüt San. ve Tic. A.Ş.

TEL : + 90 312 592 91 00

FAX : + 90 312 592 91 31

[www.ortana.com](http://www.ortana.com)

[info@ortana.com](mailto:info@ortana.com)

Distribütör

