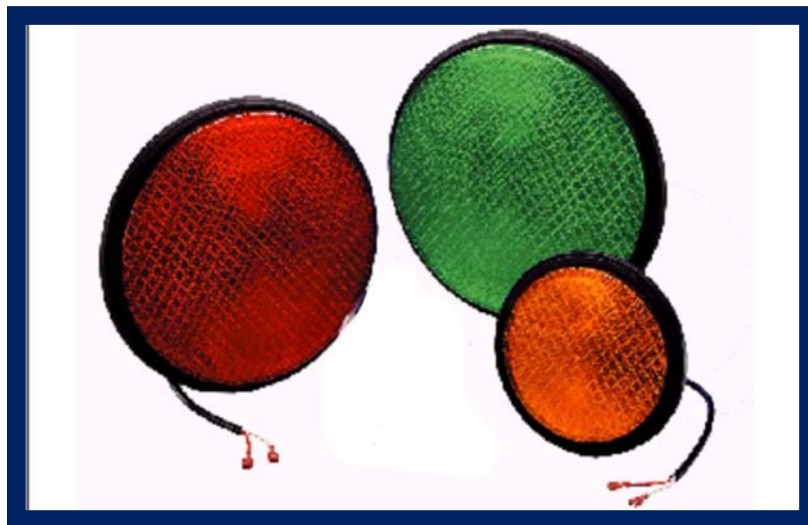


LED Traffic Signal

433 Series



12 to 24 VDC

Features:

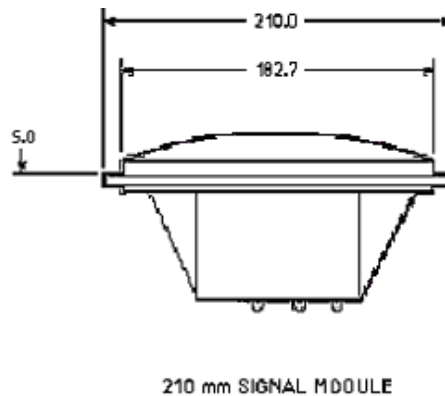
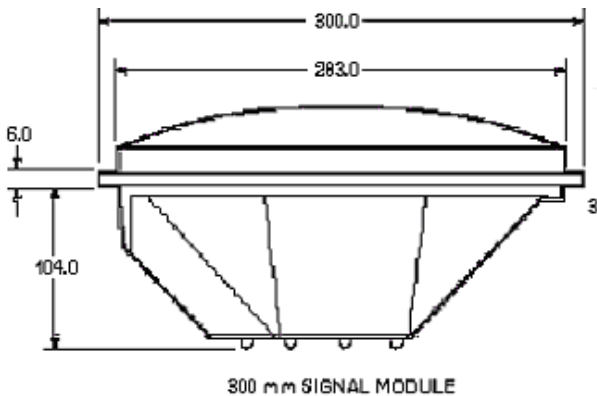
- Clustered LED's as Light Source
- Sealed for Life Unit
- Durable Materials
- Rim Dimensions Matching Existing Housings

Benefits:

- Low Energy Consumption
- Uniform Luminance of the Front Lens
- Long and Reliable Service Life
- Easy Installation in the Door of a Signal Housing

A fully contained low wattage LED Traffic Signal Module meeting European specification EN12368 class A2/1 type W. The module is primarily intended for use as a retrofit unit for traffic signals that are currently equipped with incandescent, low voltage Krypton or Halogen light sources. The LED Traffic Signal Module comprises a high Flux LED light source, Fresnel lens, and tinted or non tinted front lens. The Fresnel lens is sealed to the housing to create a dust and waterproof system. Key features of the signal are very low power consumption and a smooth, uniform appearance when illuminated. The optics and drive circuits are designed so that the failure of a single LED will neither create a dark spot, nor reduce the signal intensity.

Dimensions:



Optical Characteristics:

at $T_A = 25^\circ\text{C}$ (Typical Values 200 mm Unless Otherwise Stated)

Parameter	Symbol	Red	Amber	Green	Units
Light distribution		A2/1 type W	A2/1 type W	A2/1 type W	
Luminous Intensity	I_V	300	300	400	cd
Dominant Wavelength	λ_d	615-631,5	585-597	498,5-508	nm
Luminance Uniformity		>1:10	>1:10	>1:10	$L_{\min}:L_{\max}$
Phantom Class tinted lens		3	3	5	$I_s:I_{ph}$
Phantom Class non tinted lens		1	1	1	$I_s:I_{ph}$

Electrical Characteristics:

at $T_A = 25^\circ\text{C}$ (Input Voltage range 9-30VDC)

12-24VDC					
Parameter	Voltage	Red	Amber	Green	Units
Typical Power Consumption	12VDC	9	9	9	W
Typical Power Consumption	24VDC	8	8	8	W

Thermal Characteristics: (All Part Numbers)

Parameter	Symbol	210 mm	300 mm	Units
Operating Temperature ^[1]	T _{OP}	-40 to +60		°C
Thermal Resistance, Junction to Ambient ^[2]	R _{ΘJ-A}	2,5	2	K/W

Notes:

- 1.Refers to the ambient temperature range when power is applied to the module.
- 2.At 60 °C based on total dissipated system power.

Mechanical Data:

Parameter	210 mm	300 mm	Units
Minimum Weight	1,53		kg
Vibrations	IEC 68-2-34		
Impact Lens	EN 60598-1 Clause 4.13.4,Class IR3		
Protection Grade	EN 60529 test 13 and 14,rating IP 65		
Relative Humidity	Up to 95%		
Flammability	V-0 (US requirement)		
Minimum Cable Length Outside of Housing	1		m
Symbols	Painted on the Outer Lens		
Packing	12 signals per box	6 signals per box	

Part Numbers

200mm <input type="checkbox"/>	
143423	Red (coloured lens) <input type="checkbox"/>
143424	Amber (coloured lens) <input type="checkbox"/>
143425	Green (coloured lens) <input type="checkbox"/>
143429	Red (clear lens) <input type="checkbox"/>
143430	Amber (clear lens) <input type="checkbox"/>
143431	Green (clear lens) <input type="checkbox"/>
143432	White (clear lens) <input type="checkbox"/>

300mm <input type="checkbox"/>	
143426	Red (coloured lens) <input type="checkbox"/>
143427	Amber (coloured lens) <input type="checkbox"/>
143428	Green (coloured lens) <input type="checkbox"/>
143433	Red (clear lens) <input type="checkbox"/>
143434	Amber (clear lens) <input type="checkbox"/>
143435	Green (clear lens) <input type="checkbox"/>
143436	White (clear lens) <input type="checkbox"/>

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