# LED TRAFFIC SIGNALS Ball and Arrow Signal Modules



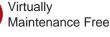


90% Less Power Consumption

Precision Optic Lens







ITE Conformance Design<sup>1</sup> CA & Other DOT's Pre-Qualified

Weatherproof



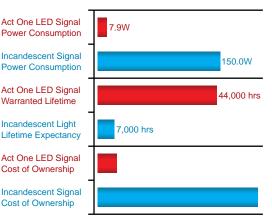


The LED alternative for traffic control systems is the wave of the future due to its high reliability and extremely low energy and maintenance costs compared to traditional incandescent signals. Cooperating with the leading LED component supplier in the industry, Dayton Signal & Lighting integrates the latest technology and accumulated industrial experience to provide a dramatically better solution for traffic control systems.

Act One LED traffic signal modules are replacements to be retrofitted into existing signal lamps and require no special tools for installation. The installation to an existing signal housing requires only the removal of the existing optical unit components, i.e., lens, lamp module, gaskets, and reflector. Our modules fit into traffic signal housings built to the VTCSH standard without any modifications to the housing.

The LED signal module lens may be a replaced without the need to replace the complete LED signal module. The modules are protected against dust and moisture intrusion according to the requirements of NEMA standards for Type 4 enclosures. The LED signal module has been designed to assure all internal LED and electronic components are adequately supported to withstand mechanical shock and vibration from high winds and other sources. The enclosure containing either the power supply or electronic components of the signal module, except for lenses, is made of UL94VO flame retardant materials. The power supply is integrated inside the module to form a single, selfcontained device, requiring no on-site assembly for installation.

The advantages of Act One LED traffic signals over traditional incandescent lights are numerous. They are energyefficient, with long-life performances. They generate little heat, are shock- and vibration-resistant and easy to install. See how Dayton Signal can light your way to a brighter future.



Note: Based on 5-year duration, LED signal model T1-12R-4, energy cost 0.08/kWh, 55% on-time, emergency repair twice a year for incandescent light bulbs.

At Dayton Signal & Lighting, we lead in the creation, development and manufacture of the industry's most advanced LED electronic display technology.

Our brightness, quality and standards are superior. We translate advanced technologies into value for our customers through products that perform and exceed expectations.

Dayton Signal & Lighting is comprised of professionals who help you make sense of technology. Professionals who make sure that the solution you want is the solution you get.

- Higher Brightness
- Higher Quality
- Higher Standards



Certified to ENERGY STAR<sup>®</sup> Standards<sup>2</sup> ITE Conformance Design<sup>1</sup> Caltrans & Other DOT's Pre-Qualified

#### **DAYTON SIGNAL & LIGHTING**

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## TRAFFIC SIGNALS SPECIFICATIONS

Specifications listed are subject to change without prior notice. All values are design specifications, or typical values we measured in laboratory environments.

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8" LED BALL SIGNAL CO	lor RED	YELLOW	GREEN	
Model Numb	oer T1-08R-4	T1-08A-4	T1-08G-4	
Nominal Applied Volta	ige	120VAC / 60Hz		
Power Consumption (Wat	tts) 4.0	6.5	5.0	
Dominant Wavelength (n	<b>m)</b> 626	592	505	
On Axis Luminous Intensity (M	lin) 250 cd	350 cd	350 cd	
LEDs Per Signal La	mp 48	88	48	
Intensity Loss Due to Single LED Faile	ure 4.2%	4.5%	4.2%	
Power Factor (F	PF) > 0.9	> 0.9	> 0.9	
Total Harmonic Distortion (TH	ID) < 20%	< 20%	< 20%	
LED Mater	rial AllnGaP	AllnGaP	InGaN	
12" LED BALL SIGNAL CO	lor RED	YELLOW	GREEN	
Model Numb	oer T1-12R-4	T1-12A-1	T1-12G-1	
Nominal Applied Volta	ige	120VAC / 60Hz		
Power Consumption (Wat	tts) 7.9	13.4	10.5	
Dominant Wavelength (n	,	592	505	
On Axis Luminous Intensity (M	lin) 450 cd	350 cd	450 cd	
LEDs Per Signal La	mp 104	196	116	
Intensity Loss Due to Single LED Fail	ure 3.8%	2.5%	4.3%	
Power Factor (F	<b>PF)</b> > 0.9	> 0.9	> 0.9	
Total Harmonic Distortion (TH	ID) < 20%	< 20%	< 20%	
LED Mater	rial AllnGaP	AllnGaP	InGaN	
12" LED ARROW SIGNAL CO	lor RED	YELLOW	GREEN	
Model Numb	per TA-12R-1	TA-12A-1	TA-12G-1	
Nominal Applied Volta	0	120VAC / 60Hz		
Power Consumption (Wat	,	6.7	7.8	
Dominant Wavelength (n	,	592	505	
On Axis Luminous Intensity (M	, ,	11,000 cd/m <sup>2</sup>	11,000 cd/m <sup>2</sup>	
LEDs Per Signal La		96	96	
Intensity Loss Due to Single LED Faile		4.3%	4.3%	
Power Factor (F	,	> 0.9	> 0.9	
Total Harmonic Distortion (TH	,	< 20%	< 20%	
LED Mater	rial AllnGaP	AllnGaP	InGaN	

UV Resistant Polycarbonate IP 34 / IP 65 -40°F ~ 165°F (-40°C ~ 74°C) -40°F ~ 185°F (-40°C ~ 85°C)

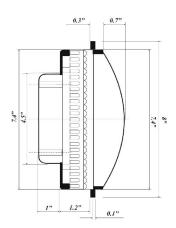
IP Rating (Out of / In Lantern Housing) Operating Temperature Storage Temperature

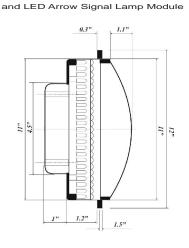
Lens and Housing Material

### PHYSICAL DIMENSIONS

COMMON SPECIFICATIONS

#### 8" LED Traffic Signal Lamp Module





12" LED Traffic Signal Lamp Module

The intensities of yellow signal modules are less than ITE specification.
Yellow signals (T1-08A-4, T1-12A-1, TA-12A-1) are NOT certified to ENERGY STAR standards.

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