LED channel letter lighting

Tetra® Atom

Visibly better

GE current
a Daintree company

Our smallest module ever, featuring best-in-class loading and groundbreaking flexibility

Tetra® Atom —the unique 24V LED system designed for channel letters as shallow as 1 inch in depth delivers incredibly uniform light, installs easily and operates efficiently. **Tetra® Atom** also features constant current technology, for even light across the entire run without the need for center tapping.

Powerful OptiLens™ X

Tetra® Atom features OptiLens™ X, our patented technology that allows for a true 165° x 140° viewing angle. This exclusive technology redirects otherwise wasted light to the sign face, making sure your signs shine.

Best-in-class loading

Load 300 **Tetra® Atom** modules per 100W power supply, up to **twice as much** as our competitors' solutions. Half the power supplies means half the material and labor costs: only with Tetra®.

Tetra® for every sign

Designed to meet the evolving needs of sign shops, **Tetra® Atom** delivers bright, uniform light in shallow channel letters, routed acrylic block letters, and halo-lit applications as shallow as 1" deep.

Tetra® Atom Features

- **Wide 165° x 140° beam angle**
- **Improved luminous intensity**
- **Efficacy: 124 lm/W**
- **24 Volt DC, Class 2 (UL), Class III (IEC)**
- **UL Wet Rated & IP66**
- **5-year limited warranty**

Tetra® Atom Spacing		
Can Depth	Coverage	Multiple Strings
1" (25mm)	2" (51mm)	1.5" (38mm)*
1.5" (38mm)	4" (102mm)	2.5" (64mm)
2" (51mm)	6" (152mm)	5" (127mm)
3" (76mm)	7" (178mm)	5" (127mm)

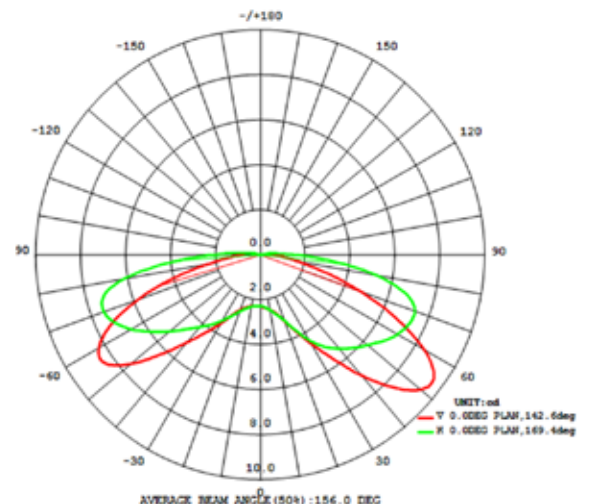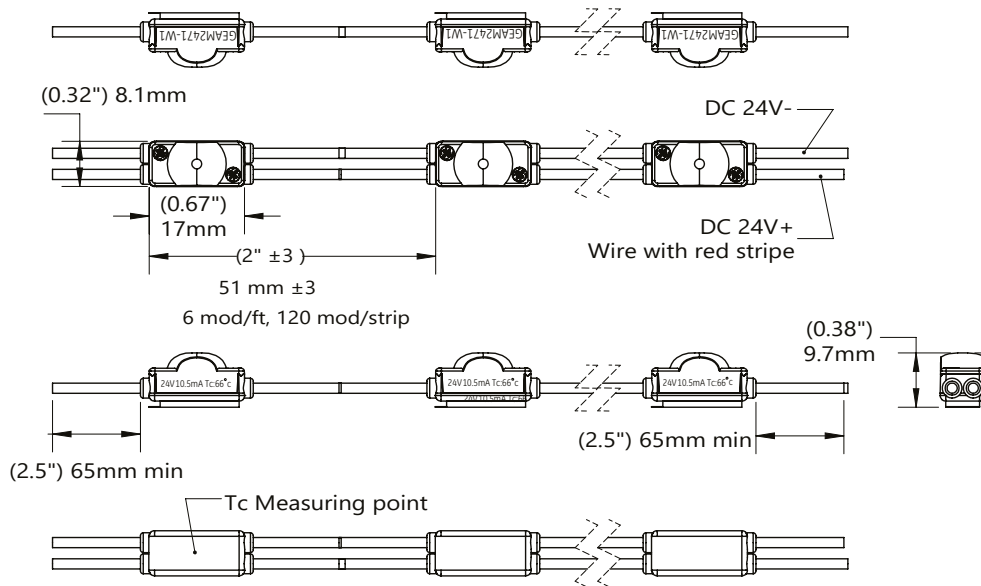*Face material must be at least 3/16" (5mm) thick

Total GE Reliability

To ensure every **Tetra® Atom** installation will operate brilliantly for years, we perform the most extensive, stringent testing in the industry. We test the LED, water and dust ingress protection, sub-system and complete system at our in-house and independent laboratories around the world. Validation of our designs, components, products and processes include high temperature, high humidity and accelerated life testing.

Mechanical Outline & Viewing Angle

Dimensions in (inches). Metric equivalent mm.

(0.32") 8.1mm

DC 24V-

(0.67") 17mm

DC 24V+
Wire with red stripe

(2" ±3)

51 mm ±3
6 mod/ft, 120 mod/strip

(0.38") 9.7mm

24V 10.5mA Tc:66°c

(2.5") 65mm min

(2.5") 65mm min

Tc Measuring point

Tetra® Atom

Components

SKU	Description	Details	Color	Pkg. Quantity	Additional Information
93119588	GEAM2471-W1	Tetra® Atom 24V 7100K	White	5 Strips/Box	120 modules per strip (20 ft/strip)
93119589	GEAM2465-W1	Tetra® Atom 24V 6500K	Warm White	5 Strips/Box	120 modules per strip (20 ft/strip)
93119591	GEAM2450-W1	Tetra® Atom 24V 5000K	Warm White	5 Strips/Box	120 modules per strip (20 ft/strip)
93119592	GEAM2441-W1	Tetra® Atom 24V 4100K	Warm White	5 Strips/Box	120 modules per strip (20 ft/strip)
93119593	GEAM2432-W1	Tetra® Atom 24V 3200K	Warm White	5 Strips/Box	120 modules per strip (20 ft/strip)

Technical Specifications

Description	Wavelength/ CCT	Typical Brightness (Lumens/ module)	Typical Brightness Lumen/ft (Lumen/m)	Energy Consumption (Strip/ Module)	Energy Consumption (System/Module)	Power Supply Loading	Viewing Angle
GEAM2471-W1	7100K	31	186 (610)	0.25w/module	0.30w/module	50 ft (15.2 m) /100WPS	165° x 140°
GEAM2465-W1	6500K	31	186 (610)	0.25w/module	0.30w/module	50 ft (15.2 m) /100WPS	165° x 140°
GEAM2450-W1	5000K	31	186 (610)	0.25w/module	0.30w/module	50 ft (15.2 m) /100WPS	165° x 140°
GEAM2441-W1	4100K	31	186 (610)	0.25w/module	0.30w/module	50 ft (15.2 m) /100WPS	165° x 140°
GEAM2432-W1	3200K	28	168 (551)	0.25w/module	0.30w/module	50 ft (15.2 m) /100WPS	165° x 140°

Technical Specifications

Specification Item	Specification			
LEDs/Module	1			
LEDs/ft (LEDs/m)	6 (18)			
Modules/ ft. (Modules/m)	6 (18)			
Cutting Resolution	Cut on wire between every module			
Power Supply	GEPS24-25-NA Input: 100-305VAC; Output: 24VDC GEPS24D-80U Input: 90-305VAC; Output: 24VDC GEPS24-100U Input: 108-305VAC; Output: 24VDC GEPS24-180U Input: 90-305VAC; Output: 24VDC GEPS24-300U Input: 108-305VAC; Output: 24VDC			
Maximum Supply Wire Limits		18 AWG/0.82 mm2 Supply Wire	16 AWG/1.31 mm2 Supply Wire	14 AWG/2.08 mm2 Supply Wire	12 AWG/3.31 mm2 Supply Wire
	25W Power Supply	120 ft./36.6 m	-	-	-
	80W Power Supply	20 ft./6.1 m	25 ft./7.6 m	35 ft./10.6 m	40 ft./12.1 m
	100W Power Supply	20 ft./6.1 m	25 ft./7.6 m	35 ft./10.6 m	40 ft./12.1 m
	180W Power Supply	20 ft./6.1 m	25 ft./7.6 m	35 ft./10.6 m	40 ft./12.1 m
	300W Power Supply	20 ft./6.1 m	25 ft./7.6 m	35 ft./10.6 m	40 ft./12.1 m
Operating Environment	-40 °C to +60 °C			
Module Dimensions (h x l x w)	0.67" x 0.32" x 0.38" (16.9 x 8.1 x 9.7mm)			
Warranty	Current offers a limited system warranty of up to five (5) years			
System Certifications	UL Recognized (C-US) #E219167, UL Classified (C-US) #E229508, CE, ROHS • IP66 rated: for dry, damp or wet location.			

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