



# HOBBY LOBBY

## Tetra<sup>®</sup> MAX

CHANNEL LETTER LIGHTING SYSTEMS

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Good things come in  
small packages

Our revolutionary **Tetra<sup>®</sup>MAX** LED signage modules have an all-new look. We've reduced the white module size by 25%, which brings our industry-leading 161 lm/W to a wider range of applications. And thanks to OptiLens™ X, **Tetra<sup>®</sup>MAX** has an improved viewing angle of 175°, ensuring perfectly uniform sign face illumination. Get more light for less with **Tetra<sup>®</sup>MAX**.

## Powerful OptiLens™ X

**Tetra® MAX** features **OptiLens™ X**, our patented technology that allows for an incredible 175° viewing angle. This exclusive technology redirects otherwise wasted light to the sign face, making sure your signs shine.

## Power Supply Loading

Now load up to 92.6 feet (28.2 m) or 139 modules of 24V **Tetra® MAX** per 100W power supply using our new and improved GLX2 power supplies.

## Improved stroke spacing

The new 24V Tetra® MAX stroke spacing has improved on average by 37%, thanks to the new OptiLens™ X wide beam angle.



## Tetra®MAX Features

- Wide 175° beam angle
- Efficacy: Up to 161 lm/W for the whites
- 24 Volt DC, UL Wet Rated & IP66
- 10-year limited warranty

## Accessories

SKU	Description	Package quantity
GETMEC1	18 AWG Wire End Caps (0.82 mm <sup>2</sup> )	100/bag
9409	18 AWG Supply Wire (0.82 mm <sup>2</sup> )	500 ft (152.40m)/spool
191600041	22-14 AWG Twist-on Wire Connector (0.33-2.08 mm <sup>2</sup> )	500/bag
192160004	18-14 AWG In-line Splice Connector (0.82-2.08 mm <sup>2</sup> )	500/bag

## Tetra® MAX Spacing

	Can Depth	Coverage
<b>Medium</b>	4-5" (102-127mm)	11-14" (279-356mm)
	5-6" (127-152mm)	14-17" (356-431mm)
<b>Large</b>	≥ 6" (152mm)	17-20" (431-508mm)

## Total Reliability

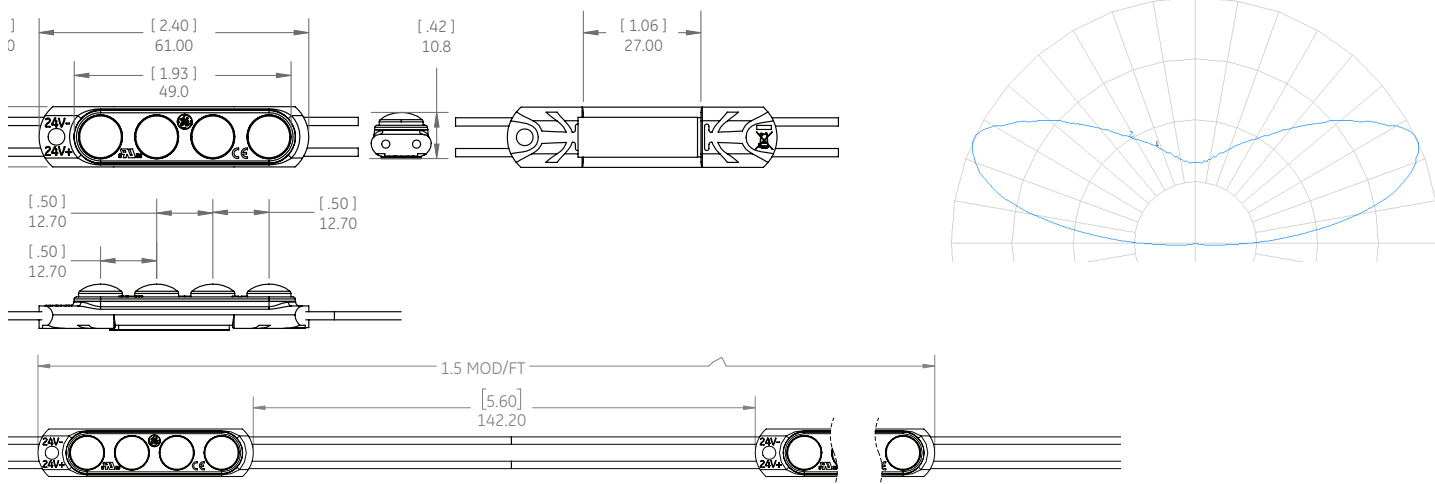
To ensure every **Tetra® MAX** installation will operate brilliantly for years, we perform the most extensive, stringent testing in the industry. We test the LED, water and dust ingress protection, sub-system and complete system at our in-house and independent laboratories around the world. Validation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



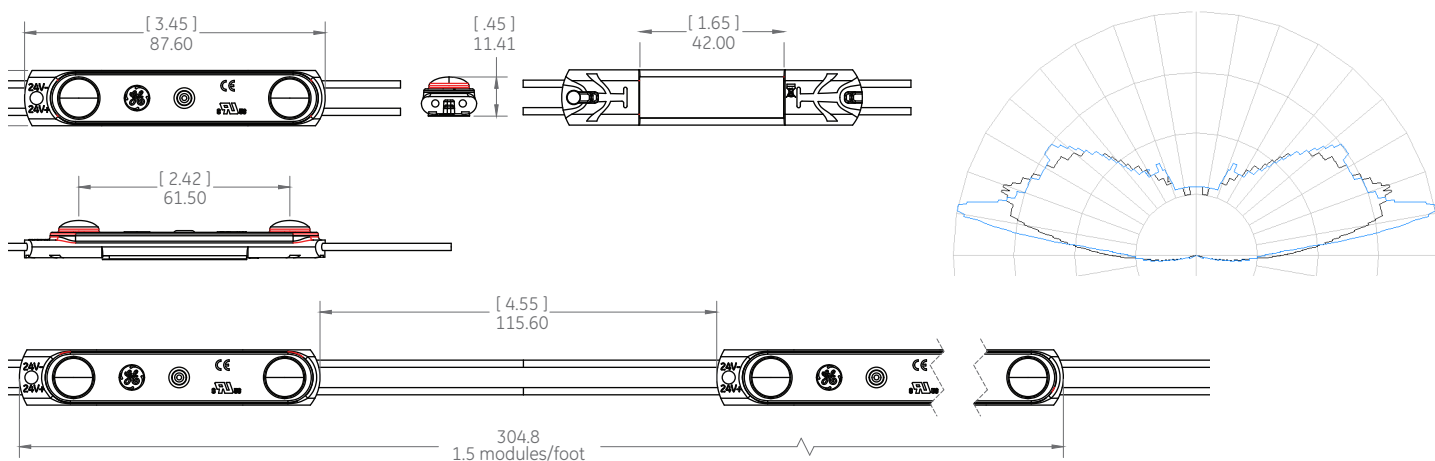
## Mechanical Outline & Viewing Angle

Dimensions in (inches). Metric equivalent mm

### Tetra® MAX 24V whites



### Tetra® MAX 24V colors



# Components

SKU	Model	Details	Color	Order unit	Pkg. Quantity	Modules per strip
93098199	GEMX2471-WIS	Tetra® MAX 24V 7100K	White	Box	5 Strips/Box	30 modules/strip (6 m/strip)
93118645	GEMX2465-WIS	Tetra® MAX 24V 6500K	Warm White	Box	5 Strips/Box	30 modules/strip (6 m/strip)
93118726	GEMX2457-WIS	Tetra® MAX 24V 5700K	Warm White	Box	5 Strips/Box	30 modules/strip (6 m/strip)
93098200	GEMX2450-WIS	Tetra® MAX 24V 5000K	Warm White	Box	5 Strips/Box	30 modules/strip (6 m/strip)
93098201	GEMX2441-WIS	Tetra® MAX 24V 4100K	Warm White	Box	5 Strips/Box	30 modules/strip (6 m/strip)
93098202	GEMX2432-WIS	Tetra® MAX 24V 3200K	Warm White	Box	5 Strips/Box	30 modules/strip (6 m/strip)
93069935	GEMX24RD-W1	Tetra® MAX colors 24V – 625 nm	Red	Box	5 Strips/Box	30 modules/strip (6 m/strip)
93070026	GEMXH24RD-W1	Tetra® MAX colors 24V HO – 625 nm	Red	Box	5 Strips/Box	30 modules/strip (6 m/strip)
93070027	GEMX24GL-W1	Tetra® MAX colors 24V – 530 nm	Green	Box	5 Strips/Box	30 modules/strip (6 m/strip)
93070028	GEMX24BL-W1	Tetra® MAX colors 24V – 470 nm	Blue	Box	5 Strips/Box	30 modules/strip (6 m/strip)
93070029	GEMX24YG-W1	Tetra® MAX colors 24V – 589 nm	Amber	Box	5 Strips/Box	30 modules/strip (6 m/strip)

## Technical Specifications

Model	Wavelength/ CCT	Typical Brightness Lumens/module	Typical Brightness Lumens/Ft (Lumens/m)	Energy Consumption Module Wattage	Energy Consumption System Wattage	100W GLX Power Supply Loading	100W GLX2/ TT Power Supply Loading	Viewing Angle
GEMX2471-WIS	7100K	100	150 (492)	0.62 W/module	0.73 W/module	87 ft (26.5 m)	92.6 ft (28.2 m)	175°
GEMX2465-WIS	6500K	100	150 (492)	0.62 W/module	0.73 W/module	87 ft (26.5 m)	92.6 ft (28.2 m)	175°
GEMX2457-WIS	5700K	100	150 (492)	0.62 W/module	0.73 W/module	87 ft (26.5 m)	92.6 ft (28.2 m)	175°
GEMX2450-WIS	5000K	100	150 (492)	0.62 W/module	0.73 W/module	87 ft (26.5 m)	92.6 ft (28.2 m)	175°
GEMX2441-WIS	4100K	100	150 (492)	0.62 W/module	0.73 W/module	87 ft (26.5 m)	92.6 ft (28.2 m)	175°
GEMX2432-WIS	3200K	90	135 (443)	0.62 W/module	0.73 W/module	87 ft (26.5 m)	92.6 ft (28.2 m)	175°
GEMX24RD-W1	625nm	20	30 (98)	0.46 W/module	0.54 W/module	120 ft (36.5 m)	126.6 ft (38.5 m)	175°
GEMXH24RD-W1	625nm	32	48 (158)	0.74 W/module	0.87 W/module	73 ft (22.3 m)	77.3 ft (23.5 m)	175°
GEMX24GL-W1	530nm	44	66 (217)	0.77 W/module	0.91 W/module	71 ft (21.7 m)	75.3 ft (22.9 m)	175°
GEMX24BL-W1	470nm	15	23 (74)	0.70 W/module	0.82 W/module	79 ft (23.9 m)	82.6 (25.1 m)	175°
GEMX24YG-W1	589nm	14	23 (74)	0.38 W/module	0.45 W/module	140 ft (42.6 m)	150.6 ft (45.9 m)	175°

## Additional Specifications

	Whites	Colors			
<b>Dimmable</b>	Yes (with dimmable power supply)	Yes (with dimmable power supply)			
<b>LEDs/Module</b>	4	2			
<b>LEDs/ft (LEDs/m)</b>	6 (19.7)	3 (9.8)			
<b>Modules/ ft. (Modules/m)</b>	1.5 (4.9)	1.5 (4.9)			
<b>Module Dimensions (h x l x w)</b>	0.41 in x 2.4 in x 0.54 in (10.46 mm x 61 mm x 13.6 mm)	0.45 in x 3.45 in x 0.63 in (11.41 mm x 87.6 mm x 16.1 mm)			
<b>Cutting Resolution</b>	Cut on wire between every module				
<b>Power Supply</b>	GEPS24-25-NA Input: 100-305VAC; Output: 24VDC GEPS24D-80U Input: 90-305VAC; Output: 24VDC GEPS24-100U Input: 108-305VAC; Output: 24VDC	GEPS24-200U Input: 90-305VAC; Output: 24VDC GEPS24-300U Input: 108-305VAC; Output: 24VDC			
<b>Maximum Supply Wire Limits</b>	<b>18 AWG/0.82 mm<sup>2</sup> Supply Wire</b>	<b>16 AWG/1.31 mm<sup>2</sup> Supply Wire</b>	<b>14 AWG/2.08 mm<sup>2</sup> Supply Wire</b>	<b>12 AWG/3.31 mm<sup>2</sup> Supply Wire</b>	
	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
	200W 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	
<b>Operating Environment</b>	-40 °C to +60 °C (-40 °F to +140 °F)				
<b>Warranty</b>	Limited system warranty of up to ten (10) years				
<b>System Certifications</b>	UL Recognized (C-US) #E219167, UL Classified (C-US) #E229508, CE, ROHS • IP66 rated: for dry, damp or wet location.				

