



LED signage lighting systems

Channel Letters

Tetra[®] MS

GE current
a Daintree company

With powerful **OptiLens™ X** and groundbreaking energy efficiency

Tetra® MS —the remarkable 24V LED system designed for small channel letters as shallow as 1.5 inches (38mm) in depth delivers incredibly uniform light, installs easily and operates efficiently. Tetra® MS is IP66 and UL wet rated which makes it more robust and reliable even under wet weather.

Powerful OptiLens™ X

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

Class-leading loading

24V **Tetra® MS** loading improves 41% from the previous 12V generation. Now load up to 85 feet (25.9 m) or 336 modules of product per GEPS24-100U-GL(X) power supply.

Improved stroke spacing

24V **Tetra® MS** stroke spacing has improved, thanks to the new OptiLens™ X wide beam angle. In addition, its new silicone flow channels have increased bonding strength by 10-20%..



Tetra® MS Features

- Wide 165° beam angle
- Improved luminous intensity
- Efficacy: 119 lm/W
- 24 Volt DC, Class 2 (UL), Class III (IEC)
- UL Wet Rated & IP66
- 10-year limited warranty

Tetra® MS 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

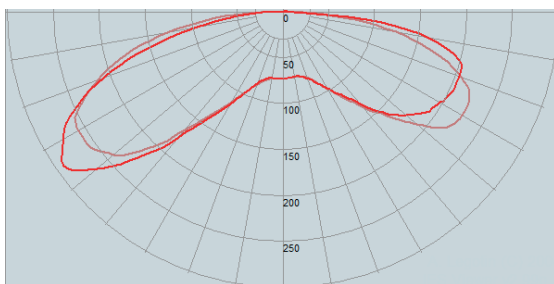
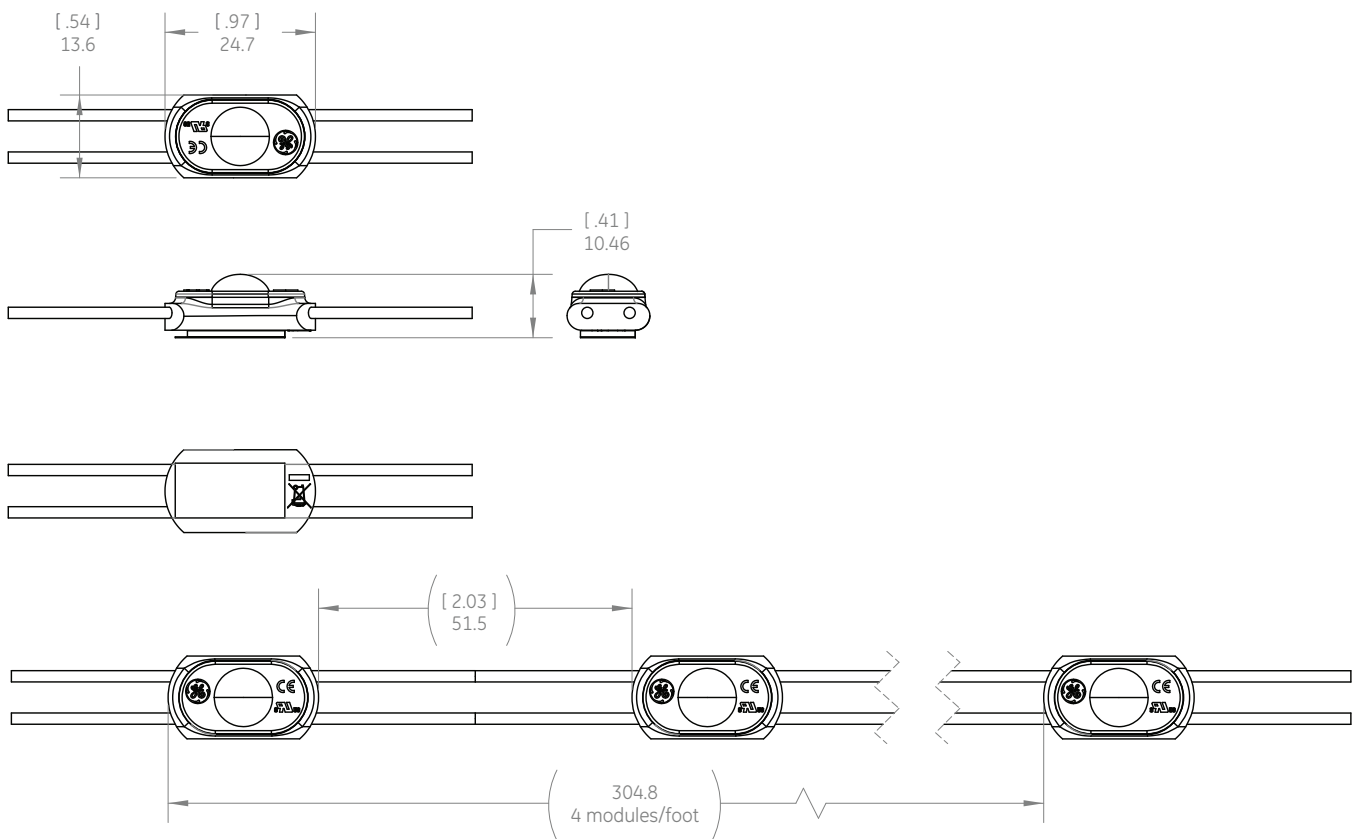
Total Reliability

To ensure every Tetra® MS 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.



GEMS2471-W1

Components

SKU	Description	Details	Color	Pkg. Quantity	Additional Information
93053674	GEMS2471-W1	Tetra® MS 24V 7100K	White	5 Strips/Box	80 modules per strip
93118641	GEMS2465-W1	Tetra® MS 24V 6500K	Warm White	5 Strips/Box	80 modules per strip
93053675	GEMS2450-W1	Tetra® MS 24V 5000K	Warm White	5 Strips/Box	80 modules per strip
93053676	GEMS2441-W1	Tetra® MS 24V 4100K	Warm White	5 Strips/Box	80 modules per strip
93053677	GEMS2432-W1	Tetra® MS 24V 3200K	Warm White	5 Strips/Box	80 modules per 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
GEMS2471-W1	7100K	27.5	110 (361)	0.23w/module	0.27w/module	85 ft (25.9 m) /100WPS	165
GEMS2465-W1	6500K	27.5	110 (361)	0.23w/module	0.27w/module	85 ft (25.9 m) /100WPS	165
GEMS2450-W1	5000K	27.5	110 (361)	0.23w/module	0.27w/module	85 ft (25.9 m) /100WPS	165
GEMS2441-W1	4100K	27.5	110 (361)	0.23w/module	0.27w/module	85 ft (25.9 m) /100WPS	165
GEMS2432-W1	3200K	25	100 (328)	0.23w/module	0.27w/module	85 ft (25.9 m) /100WPS	165

Technical Specifications

Specification Item	Specification																									
LEDs/Module	1																									
LEDs/ft (LEDs/m)	4 (13)																									
Modules/ ft. (Modules/m)	4 (13)																									
Cutting Resolution	Cut on wire between every module																									
Power Supply	GEPS24-25U-EU Input: 220-240VAC; Output: 24VDC GEPS24D-80U Input: 90-305VAC; Output: 24VDC GEPS24-100U-GL(X) Input: 108-305VAC; Output: 24VDC GEPS24-300U-GL Input: 108-305VAC; Output: 24VDC																									
Maximum Supply Wire Limits	<table border="1"> <thead> <tr> <th></th> <th>18 AWG/0.82 mm² Supply Wire</th> <th>16 AWG/1.31 mm² Supply Wire</th> <th>14 AWG/2.08 mm² Supply Wire</th> <th>12 AWG/3.31 mm² Supply Wire</th> </tr> </thead> <tbody> <tr> <td>25W Power Supply</td> <td>120 ft./36.6 m</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>80W Power Supply</td> <td>20 ft./6.1 m</td> <td>25 ft./7.6 m</td> <td>35 ft./10.6 m</td> <td>40 ft./12.1 m</td> </tr> <tr> <td>100W Power Supply</td> <td>20 ft./6.1 m</td> <td>25 ft./7.6 m</td> <td>35 ft./10.6 m</td> <td>40 ft./12.1 m</td> </tr> <tr> <td>300W Power Supply</td> <td>20 ft./6.1 m</td> <td>25 ft./7.6 m</td> <td>35 ft./10.6 m</td> <td>40 ft./12.1 m</td> </tr> </tbody> </table>		18 AWG/0.82 mm ² Supply Wire	16 AWG/1.31 mm ² Supply Wire	14 AWG/2.08 mm ² Supply Wire	12 AWG/3.31 mm ² 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	300W Power Supply	20 ft./6.1 m	25 ft./7.6 m	35 ft./10.6 m	40 ft./12.1 m
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Operating Environment	-40 °C to +60 °C																									
Module Dimensions (h x l x w)	10.46 x 24.7 x 13.6 mm																									
Warranty	Current offers a limited system warranty of up to ten (10) years																									
System Certifications	UL Recognized (C-US) #E219167, UL Classified (C-US) #E229508, CE, ROHS • IP66 rated: for dry, damp or wet location.																									