

GE  
Lighting

# Tetra<sup>®</sup> miniMAX

LED Lighting System

Wet or dry—our **brightest** solution  
for **small** channel letters



imagination at work

# Tetra<sup>®</sup> miniMAX

## Maximized Output. Minimized Expense.

**Tetra<sup>®</sup> miniMAX**—the remarkable LED system designed for small channel letters as shallow as 1.5 inches in depth—is now **10%** brighter than our previous product. It delivers incredibly uniform light, installs easily and operates efficiently. Working closely with sign builders and owners, we've refined our design to improve performance while decreasing the amount of product required, further reducing installation and material costs. Our system can now operate 68 feet of product per 60W power supply (up from 60 feet in our previous design) and deliver **13%** greater loading for even better material and installation labor savings.

**10% Brighter!**



### Powerful OptiLens<sup>™</sup>

**Tetra miniMAX** features **OptiLens<sup>™</sup>** a patented technology that captures otherwise wasted light and redirects it towards the illuminated surface with impressive uniformity. It optimizes each LED—which enables wider stroke spacing—reducing the amount of material needed per sign while helping protect the LED against moisture, humidity, damage and corrosion.

### New Tetra<sup>®</sup> miniMAX Wet Location Rated

Now there's a miniMAX solution for **wet locations** where saturation with water or other liquids is likely. It's all the same performance features of miniMAX—plus overmolded design that protects against water egress, dust and damage and a special module top surface to eliminate water retention—no separate enclosure is required.

Continuous wire through LED module uses IDC connectors vs. soldering for maximum strain relief

Lens and overmold sealing improved to meet IP66 with 5 Year Warranty

**OptiLens<sup>™</sup>** creates a wide viewing angle, maximizing light coverage area while protecting the LED

Color Dot on top  
White-Gray, WW-Yellow

Can cut between any modules

Overmolded design protects components from moisture, damage and corrosion

Tab on back of 3M tape for faster & easier removal

Pre-drilled hole makes mounting easy





a product of  
**ecomagination™**

## Can cut product required almost in half

Many LED systems use about 13 LED modules in 2 rows to fill a capital "T" channel letter that's 2 feet high.

Improved **Tetra miniMAX**, requires just 7 LED modules to fill the exact same letter (giving up some brightness) while providing outstanding uniformity. That's **46% fewer modules**.

**Use one row, not two.** **Tetra miniMAX** stretches stroke spacing to an impressive 7 inches in a 3-inch depth channel while maintaining impressive light uniformity on the sign face. It protects your customers' brand image while reducing product costs and saving you installation time.

## Total GE Reliability

To ensure every **Tetra miniMAX** installation will operate brilliantly for years, we perform the most extensive, stringent testing in the industry. Rather than rely solely on test data from LED suppliers, we test the LED, 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.

## Components

| SKU       | Description   | Package Quantity                   |
|-----------|---|------------------------------------|
| GEMM71-W1 | Tetra® miniMAX Wet White 7100K                                    | 100 ft (30.48 m)/box (250 modules) |
| GEMM50-W1 | Tetra® miniMAX Wet Warm White 5000K                               | 100 ft (30.48 m)/box (250 modules) |
| GEMM41-W1 | Tetra® miniMAX Wet Warm White 4100K                               | 100 ft (30.48 m)/box (250 modules) |
| GEMM32-W1 | Tetra® miniMAX Wet Warm White 3200K                               | 100 ft (30.48 m)/box (250 modules) |
| GEMM71-2  | Tetra® miniMAX White 7100K  | 100 ft (30.48 m)/box (250 modules) |
| GEMM50-2  | Tetra® miniMAX Warm White 5000K                                   | 100 ft (30.48 m)/box (250 modules) |
| GEMM41-2  | Tetra® miniMAX Warm White 4100K                                   | 100 ft (30.48 m)/box (250 modules) |
| GEMM32-2  | Tetra® miniMAX Warm White 3200K                                   | 100 ft (30.48 m)/box (250 modules) |
| GEMMRD-1  | Tetra® miniMAX Red  | 100 ft (30.48 m)/box (250 modules) |
| GEMMBL-1  | Tetra® miniMAX Blue   | 100 ft (30.48 m)/box (250 modules) |
| GEMMGL-1  | Tetra® miniMAX Green  | 100 ft (30.48 m)/box (250 modules) |
| GEMMPO-1  | Tetra® miniMAX Orange   | 100 ft (30.48 m)/box (250 modules) |
| 9409      | 18 AWG Supply Wire (0.82 mm <sup>2</sup> )                        | 500 ft /spool (152.4 m)            |
| 191600041 | 22-14 AWG Twist-On Wire Connectors (0.33 - 2.08 mm <sup>2</sup> ) | 500/ PK                            |
| 192160004 | 18-14 AWG In-line Connectors (IDC) (0.82-2.08 mm <sup>2</sup> )   | 500/ PK                            |

## Technical Specifications

| Color                        | Wavelength   | Typical Brightness (lumens/module) | Typical Brightness (lumens/ft.) | Energy Consumption (Strip/Module) | Energy Consumption (System/Module) | Power Supply Loading | Viewing Angle |
|------------------------------|--------------|------------------------------------|---------------------------------|-----------------------------------|------------------------------------|----------------------|---------------|
| Tetra miniMAX White Wet      | 7100K, 5000K | 36                                 | 90                              | 0.32                              | 0.38                               | 68ft (170 modules)   | 150           |
| Tetra miniMAX Warm White Wet | 4100K, 3200K | 34, 30                             | 85, 75                          | 0.32                              | 0.38                               | 68ft (170 modules)   | 150           |
| Tetra miniMAX White          | 7100K, 5000K | 36                                 | 90                              | 0.32                              | 0.38                               | 68ft (170 modules)   | 150           |
| Tetra miniMAX Warm White     | 4100K, 3200K | 34, 30                             | 85, 75                          | 0.32                              | 0.38                               | 68ft (170 modules)   | 150           |
| Tetra miniMAX Red            | 625nm        | 11                                 | 27                              | 0.39                              | 0.47                               | 60ft. (150 modules)  | 150           |
| Tetra miniMAX Blue           | 467nm        | 8                                  | 19                              | 0.39                              | 0.47                               | 60ft. (150 modules)  | 150           |
| Tetra miniMAX Green          | 530nm        | 24                                 | 60                              | 0.39                              | 0.47                               | 60ft. (150 modules)  | 150           |
| Tetra miniMAX Orange         | 606nm        | 19                                 | 48                              | 0.48                              | 0.59                               | 60ft. (150 modules)  | 150           |

| Specification Item                | Specification   |  |     |                   |                |                |  |                |  |                                       |                 |  |                                       |                 |  |                                       |
|-----------------------------------|---|--|-----|-------------------|----------------|----------------|--|----------------|--|---------------------------------------|-----------------|--|---------------------------------------|-----------------|--|---------------------------------------|
| LEDs/ Module                      | 3   |  |     |                   |                |                |  |                |  |                                       |                 |  |                                       |                 |  |                                       |
| Module/ft.                        | 2.5   |  |     |                   |                |                |  |                |  |                                       |                 |  |                                       |                 |  |                                       |
| Cutting Resolution                | Cut on wire between every module  |  |     |                   |                |                |  |                |  |                                       |                 |  |                                       |                 |  |                                       |
| Power Supply                      | GEPS12-20 Input: 90-264VAC; Output: 12VDC<br>GEPS12-60-NA Input: 108-305VAC; Output: 12VDC<br>GEPS12-60-GL Input: 108-305VAC; Output: 12VDC<br>GEPS12W-60 Input: 90-264VAC; Output: 12VDC<br>GEPS12D-60U Input: 90-305VAC; Output: 12VDC  |  |     |                   |                |                |  |                |  |                                       |                 |  |                                       |                 |  |                                       |
| Maximum Supply Wire Limits        | <table border="1"> <thead> <tr> <th>60W, 80W, 100W, 180W</th> <th>20W</th> <th>Supply Wire Gauge</th> </tr> </thead> <tbody> <tr> <td>15 ft. (4.6 m)</td> <td>30 ft. (9.1 m)</td> <td>18AWG/0.82mm<sup>2</sup> supply wire - 9409</td> </tr> <tr> <td>23 ft. (7.0 m)</td> <td></td> <td>16AWG/1.31mm<sup>2</sup> supply wire</td> </tr> <tr> <td>38 ft. (11.6 m)</td> <td></td> <td>14AWG/2.08mm<sup>2</sup> supply wire</td> </tr> <tr> <td>65 ft. (19.8 m)</td> <td></td> <td>12AWG/3.31mm<sup>2</sup> supply wire</td> </tr> </tbody> </table> | 60W, 80W, 100W, 180W                         | 20W | Supply Wire Gauge | 15 ft. (4.6 m) | 30 ft. (9.1 m) | 18AWG/0.82mm <sup>2</sup> supply wire - 9409 | 23 ft. (7.0 m) |  | 16AWG/1.31mm <sup>2</sup> supply wire | 38 ft. (11.6 m) |  | 14AWG/2.08mm <sup>2</sup> supply wire | 65 ft. (19.8 m) |  | 12AWG/3.31mm <sup>2</sup> supply wire |
| 60W, 80W, 100W, 180W              | 20W   | Supply Wire Gauge                            |     |                   |                |                |  |                |  |                                       |                 |  |                                       |                 |  |                                       |
| 15 ft. (4.6 m)                    | 30 ft. (9.1 m)  | 18AWG/0.82mm <sup>2</sup> supply wire - 9409 |     |                   |                |                |  |                |  |                                       |                 |  |                                       |                 |  |                                       |
| 23 ft. (7.0 m)                    |   | 16AWG/1.31mm <sup>2</sup> supply wire        |     |                   |                |                |  |                |  |                                       |                 |  |                                       |                 |  |                                       |
| 38 ft. (11.6 m)                   |   | 14AWG/2.08mm <sup>2</sup> supply wire        |     |                   |                |                |  |                |  |                                       |                 |  |                                       |                 |  |                                       |
| 65 ft. (19.8 m)                   |   | 12AWG/3.31mm <sup>2</sup> supply wire        |     |                   |                |                |  |                |  |                                       |                 |  |                                       |                 |  |                                       |
| Operating Environment             | -40 °C to + 60 °C   |  |     |                   |                |                |  |                |  |                                       |                 |  |                                       |                 |  |                                       |
| Module Dimensions (h x l x w) Wet | 0.31 x 2.27 x 0.72 in (9.5 x 57.7x 18.2 mm)   |  |     |                   |                |                |  |                |  |                                       |                 |  |                                       |                 |  |                                       |
| Module Dimensions (h x l x w)     | 0.31 x 1.89 x 0.47 in ( 8 x 48 x 12 mm)   |  |     |                   |                |                |  |                |  |                                       |                 |  |                                       |                 |  |                                       |
| Sign Dimensions                   | For best results, recommended sign depth is 1.5 inches (38mm) or greater  |  |     |                   |                |                |  |                |  |                                       |                 |  |                                       |                 |  |                                       |
| Warranty                          | GE offers a limited system warranty of up to five (5) years   |  |     |                   |                |                |  |                |  |                                       |                 |  |                                       |                 |  |                                       |
| System Certifications             | UL Recognized #E219167, UL Classified #E229508, CE, C-tick, RoHS, IP66 rated for dry, damp or wet location  |  |     |                   |                |                |  |                |  |                                       |                 |  |                                       |                 |  |                                       |



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