

# Exton IP66 24VDC Power Supply



### 40W - Will operate 4 Kore-EX5 Modules or 5-ft of Solo<sup>1</sup> Catalog Number

Non-Dimming Driver D-40W-120/277V-IP66-LRPSE-GY 0-10V Dimming Driver D-DM-40W-120/277V-IP66-LRPSE-GY

## 60W - Will operate 7 Kore-EX5 Modules or 8-ft of Solo<sup>1</sup>

Catalog Number Non-Dimming Driver D-60W-120/277V-IP66-LRPSE-GY 0-10V Dimming Driver D-DM-60W-120/277V-IP66-LRPSE-GY

## 100W - Will operate 11 Kore-EX5 Modules or 14-ft of Solo<sup>1</sup>

Catalog Number Non-Dimming Driver D-100W-120/277V-IP66-LRPSE-GY 0-10V Dimming Driver D-DM-100W-120/277V-IP66-LRPSE-GY

## 150W - Will operate 17 Kore-EX5 Modules or 20-ft of Solo<sup>1</sup>

Catalog Number Non-Dimming Driver D-150W-120/277V-IP66-LRPSE-GY 0-10V Dimming Driver D-DM-150W-120/277V-IP66-LRPSE-GY

## 240W - Will operate 27 Kore-EX5 Modules or 32-ft of Solo<sup>1</sup>

Catalog Number Non-Dimming Driver D-240W-120/277V-IP66-LRPSE-GY 0-10V Dimming Driver D-DM-240W-120/277V-IP66-LRPSE-GY

### 288W - Will operate 32 Kore-EX5 Modules or 38-ft of Solo<sup>1</sup> Catalog Number

0-10V Dimming Driver D-DM-288W-120/277V-IP66-LRPSE-GY

# 320W - Will operate 36 Kore-EX5 Modules or 42-ft of Solo<sup>1</sup>

Catalog Number Non-Dimming Driver D-320W-120/277V-IP66-LRPSE-GY

#### Notes:

<sup>1</sup>To calculate max capacity for combined EX5-Module and EX-SOLO fixtures on same span, start with max module count and remove (1) module for every (1) foot of Solo added.



# 24VDC Power Supplies - LED Drivers - IP66 EXTERIOR MOUNTING

Description	Max # of Kore-EX5 Modules	Catalog #	Watts <sup>1</sup>	Min / Max <sup>3</sup>	Tegan Enclosure Size	Typical Driver Links
40W Non-Dimming Driver	4	D-40W-120/277V-IP66- LRPSE-GY	40W	1W/30W	Large 12" H x 10" W x 5 3/8" D	40W Non-Dimming Driver
40W 0-10V Dimming Driver	4	D-DM-40W-120/277V-IP66- LRPSE-GY	40W	1W / 30W	Large 12" H x 10" W x 5 3/8" D	40W Driver & Dimming Module
60W Non-Dimming Driver	7	D-60W-120/277V-IP66- LRPSE-GY	60W	1W / 49W	Large 12" H x 10" W x 5 3/8" D	60W Non-Dimming Driver
60W 0-10V Dimming Driver	7	D-DM-60W-120/277V-IP66- LRPSE-GY	60W	1W / 49W	Large 12" H x 10" W x 5 3/8" D	60W Driver & <u>Dimming Module</u>
100W Non-Dimming Driver	11	D-100W-120/277V-IP66- LRPSE-GY	100W	1W / 77W	Large 12" H x 10" W x 5 3/8" D	100W Non-Dimming Driver
100W 0-10V Dimming Driver	11	D-DM-100W-120/277V-IP66- LRPSE-GY	100W	1W / 77W	Large 12" H x 10" W x 5 3/8" D	100W Driver & <u>Dimming Module</u>
150W Non-Dimming Driver	17	D-150W-120/277V-IP66- LRPSE-GY	150W	1W / 119W	Large 12" H x 10" W x 5 3/8" D	150W Non-Dimming Driver
150W 0-10V Dimming Driver	17	D-DM-150W-120/277V-IP66- LRPSE-GY	150W	1W / 119W	Large 12" H x 10" W x 5 3/8" D	150W Driver & Dimming Module
240W Non-Dimming Driver	27	D-240W-120/277V-IP66- LRPSE-GY	240W	1W / 189W	Large 12" H x 10" W x 5 3/8" D	240W Non-Dimming Driver
240W 0-10V Dimming Driver	27	D-DM-240W-120/277V-IP66- LRPSE-GY	240W	1W / 189W	Large 12" H x 10" W x 5 3/8" D	240W Driver & Dimming Module
320W Non-Dimming Driver	36	D-320W-120/277V-IP66- LRPSE-GY	320W	1W / 252W	Large 12" H x 10" W x 5 3/8" D	320W Non-Dimming Driver
288W 0-10V Dimming Driver	32	D-DM-288W-120/277V-IP66- LRPSE-GY	288W	1W /230W	Large 12" H x 10" W x 5 3/8" D	320W Driver & 288W <u>Dimming Module</u>

#### Notes:

- <sup>1</sup> Refer to manufacturer's specsheets (see links in blue above) for recommended remote mount distance.
- $^{\rm 2}$   $\,$  Load power supplies at 80% of their maximum nominal output.
- <sup>3</sup> Do not exceed 150 feet between last EX5 module (i.e. the module farthest away from the Power Supply) and the Power Supply.
- <sup>4</sup> Do not group EX5 modules near the end of a long run; on a 110 foot span, keep the average distance from EX5s to Power Supply about 75 feet.
- <sup>5</sup> The length of the Powerspan Cable, and any intermediate remote wiring, must be counted together (ie with a 100' span, and 50' of building wire between the start of the span and the powersupply, one would be at the maximum 150' distance.
- <sup>6</sup> Do not operate in environments above 40C/104F ambient air temperature.
- <sup>7</sup> Do not operate where the sun's radiation causes any metal surface to be greater than 40C/104F.
- <sup>8</sup> Do not operate below 0C/-32F.
- <sup>9</sup> The Polarity of the drivers output to the Exton Powerspan Cable does not matter.
- <sup>10</sup> Do not exceed a maximum of 40 Exton LED Fixtues per run/circuit.
- VOLTAGE DROP: To calculate the maximum Exton span, add the desired span distance to the wiring distance between the power supply and the start of the Exton span cable. This is the "total run." All wiring used between the power supply and the start of the Exton cable should be 10AWG or thicker. At 250W loads, the maximum advisable total run length is 150'. At 100W loads, the total run length is 250'.
- <sup>12</sup> Due to the rapidly evolving technology for Semiconductor products, Tegan driver options are subject to change at any time, without notice. In addition, if any of the standard drivers are out of stock or discontinued, Tegan Lighting will supply an equal as needed. Tegan can also supply alternative drivers upon request; contact the factory for details.
- <sup>13</sup> Tegan LED emitters, like all LEDs, undergo a natural depreciation in lumen output. This depreciation is within the specifications of LM-80. Extreme ambient temperatures, dusty environments, and power conditions may affect the depreciation. Wattage requirements and lumen output are subject to change with ongoing developments in LED technology.
- <sup>14</sup> Enclosures can be field painted to match the structure or contact the factory for custom colors.
- <sup>15</sup> Exton System, Monopoints and LED Modules are specified separately. Refer to the linked Specification Sheets on p. 3 for more details
- <sup>16</sup> We have listed the maximum number of Kore-EX5 Modules for each Driver option above based on the following common practice: Recommended De-Rating: Like all electronic power supplies, life is significantly increased when loads are 75/80% or less of the nominal power capacity. Best life is in climate controlled conditions, or when the power supply stays below 70C. The type of enclosure and ambient environment can affect the operating temperature, and therefore the lifetime of the power supply. For all Tegan Lighting enclosures, load power supplies to only 75/80% of their nominal. These are general suggestions to
- increase the life of the supply in moderate climates; the actual operating lifetime of the power supply depends on the actual environment and use. Do not operate the power supplies during the day with direct sunlight with extreme hot temperatures.
- <sup>17</sup> See previous page for capacities with Solo fixtures.



# **IP66** Power Supplies



 Category:
 Tegan Lighting offers a wide variety of 24VDC drivers that are compatible with Exton Monopoints and Powerspan Cable Systems for various layouts. Specify 0-10V dimming controls with dimming LED drivers. Refer to the linked driver specification sheets in the chart on page 2 for details.

 Exterior
 Enclosure:

 IP66 Exterior mount.

Large - 12" H x 10" W x 5-5/8" D - Exterior, NEMA Type 3R, 4, 12 and 13, Remote Power Supply Enclosure (IP66-LRPSE). Remote mounting the power supplies provide a clean minimalist aesthetic. Nema 4 Enclosure provides greater level of protection, resistant to any sort of sprayed or driven water jets from any direction. Requires installers to drill housing and install waterproof fittings to allow attachment to supply power, as well as to Kore-EX Powerspan cable. This allows flexibility regarding installation position and supply connections while preserving full IP66 rating.

- Material: Steel
- Finish: Grey powdercoat.
- Systems: Specified separately. Exton Monopoint, Exton Powerspan Cable, Exton Rigid Trac. Remote Power Supplies are required for all Exton Powerspan and Monopoint systems. Refer to linked Specsheets and Installation Sheets for system details
- Drivers: Refer to p. 2 for details. Exton Systems can only be used with Tegan Lighting's Power Supply Enclosures and Driver(s). Any substitution "by others" will void the warranty and listing. Refer to notes under power supply charts regarding derating recommendations.
- LED Modules: Kore-EX5: Total Input Power 6.5W, EX-SOLO: Total Input Power 5.5W/Ft.
  - Installation: Electrical contractor to connect electrical wire from the transformer to the system power feed utilizing the correct gauge to provide the proper voltage at the Systems/Monopoints per local standards and codes. The wire gauge used to supply power to the Systems/Monopoints should be sized according to the distance between the transformer and the Systems/Monopoints. Enclosure and power supply are provided as a kit. Refer to Exton Cable Installation Instructions, Exton Monopoint Installation Instructions or Exton Rigid Trac Installation Instructions for details. Refer to Exton Application Guide for layout and specification assistance.
    - Labels: IP66 Enclosure Exterior Listed. ETL & CE Listed to UL Standard 2108 Low Voltage Lighting; Tested to UL 1574 Issue: 2004/09/07 Ed: 3 Rev:2012/01/25 UL Standard for Safety Track Lighting Systems. IP66.

Refer to linked Power Supply Specsheets on the previous page for Manufacturer's listing. In a continuing effort to offer the best product possible we reserve the right to change, without notice, specifications or materials. Technical specification sheets that appear on teganlighting.com are the most recent version and supersede all other versions that exist in any other printed or electronic form.





## Power Supply - Installation Guidelines at a Glance





#### Loading and Operation Guidelines:

24VDC Driver

It's important not to exceed these guidelines in order to prevent damage to the Power Supply or cause problems with performance:

- Load power supplies at 80% of their maximum nominal output.
- Do not exceed 150 feet between last EX5 module (i.e. the module farthest away from the Power Supply) and the Power Supply.

120V

- Do not group EX5 modules near the end of a long run; on a 150 foot span, keep the average distance from EX5s to Power Supply about 75 feet.
- The length of the Powerspan Cable, and any intermediate remote wiring, must be counted together (ie with a 100' span, and 50' of building wire between the start of the span and the powersupply, one would be at the maximum 150' distance.
- Do not operate in environments above 40C/104F ambient air temperature.
- Do not operate where the sun's radiation causes any metal surface to be greater than 40C/104F.
- Do not operate below 0C/-32F.
- The Polarity of the drivers output to the Exton Powerspan Cable does not matter.



# Power Supply - Installation Guidelines at a Glance



#### Hookup to Adjacent Remote Power Feed

The Power Feed may be placed so the wire gland which seals around the conductors is under the Cover of the Tension Mount End Bracket. In this case, the conductors are passed through and then connected to the building wires coming from the Tegan Lighting Exton Power Supply. Note that the Power Feed can not be used as an end feed; it is not structural.

Be sure to caulk behind the Power Feed Plate, as well as behind the screws.

Polarity does not matter.



## Hook-up to Remote Power Feed

If the Remote Powerfeed is farther away, use Surface Brackets every 12" and within 2" of the start and end.

Exton Powerspan Cable and LED Module connections should not be made below the outdoor ambient temperature of 50F/10C.

Refer to Installation Sheet for more details.

