LED-30W Series
Fixed Output and Dimmable
Switch Mode LED Drivers

**Electrical Specifications**

- **Input Voltage Range:** 100-277 Vac Nom. (90-305 V Min/Max)
- **Input Over-Voltage:** Can endure 320 Vac for 48 Hrs, 350Vac for 2 Hrs
- **Frequency:** 50/60 Hz Nom. (47-63 Hz Min/Max)
- **Power Factor:** >0.90 @ full load, 100V through 277V
- **Inrush Current:** <15.0 Amps max @ 230 Vac, cold start 25ºC
- **Input Current:** 0.41 Amps max (LED30W-42-C0700: 0.43 Amp max)
- **Maximum Power:** 30W
- **Current Accuracy:** ±1% Over input line variation
- **Load Regulation:** ±3%
- **THD:** <20% @ full load
- **Leakage Current:** 400 µA Typical
- **Hold Up Time:** Half Cycle

**Protections**

- Over-voltage Output
- Over-current Output
- Short Circuit Auto Recovery

**Environmental Specifications**

- **Max Case Life Temp:** (5 year warranty) 66ºC
- **Maximum Case Temp (UL):** 90ºC
- **Minimum Starting Temp:** -30ºC
- **Storage Temperature:** -40ºC to +85ºC
- **Humidity:** 5% to 95%
- **Cooling:** Convection
- **Vibration Frequency:** 5 to 55 Hz/2g, 30 minutes
- **Sound Rating:** Class A
- **MTBF:** 484,000 Hours at full load and 40ºC ambient conditions per MIL-217F Notice 2
- **EMC:** FCC 47CFR Part 15 Class B compliant

- **Total Power:** 30 Watts
- **Input Voltage:** 100-277 Vac Nom.
- **UL Dry & Damp Location Rated**
- **IP66**
- **High Power Factor**
- **Constant Current & Constant Voltage with Isolation**
- **Black Magic Thermal Advantage™ Plastic Housing**
- **UL Sign Components Manual (S.A.M. Models)**

**Dimming Option:**

- 0-10V & Resistance dimmable models include an extra two wires +Purple/-Pink on the output side
- “D” Compatible with most quality 0-10V wall dimmers. See page 3 for additional specifications.

**Constant Current Models**

<table>
<thead>
<tr>
<th>Model</th>
<th>Output Current (mA ±3%)</th>
<th>Output Voltage Range (Vdc)</th>
<th>Max. Output Power (W)</th>
<th>Typical Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>LED30W-85-C0350-XX</td>
<td>350</td>
<td>28-85</td>
<td>29.8</td>
<td>88%</td>
</tr>
<tr>
<td>LED30W-75-C0400-XX</td>
<td>400</td>
<td>25-75</td>
<td>30</td>
<td>87%</td>
</tr>
<tr>
<td>LED30W-66-C0450-XX</td>
<td>450</td>
<td>22-66</td>
<td>29.7</td>
<td>87%</td>
</tr>
<tr>
<td>LED30W-42-C0700-XX</td>
<td>700</td>
<td>14-42</td>
<td>29.4</td>
<td>87%</td>
</tr>
<tr>
<td>LED30W-36-C0830-XX</td>
<td>830</td>
<td>12-36</td>
<td>29.9</td>
<td>87%</td>
</tr>
<tr>
<td>LED30W-24-C1250-XX</td>
<td>1250</td>
<td>8-24</td>
<td>30</td>
<td>86%</td>
</tr>
<tr>
<td>LED30W-18-C1660-XX</td>
<td>1660</td>
<td>6-18</td>
<td>30</td>
<td>85%</td>
</tr>
<tr>
<td>LED30W-12-C2500-XX</td>
<td>2500</td>
<td>4-12</td>
<td>30</td>
<td>85%</td>
</tr>
</tbody>
</table>

**Note:**

LED drivers are designed and intended to operate LED loads only. Non-LED loading may be outside the specified design limits of our LED drivers, and therefore cannot be covered by any warranty. If you desire to use our LED drivers to operate non-LED loads please contact us to discuss compatibility.

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LED-30W Series
Fixed Output and Dimmable with Mode LED Drivers

Dimensions

Power Characteristics

Note: The area under the life-temperature curve represents where the driver has highly reliable operation within specification. Driver performance may drift out of published specifications as the hours of operation exceed the curve at a given temperature. Higher operating temperatures increase the chances of a failure to function. Other electrical, mechanical and environmental factors affect driver lifetime but are not represented in this calculation.

UL Conditions of Acceptability
See website for additional information
"D" Option: 0-10VDC and Resistance Dimming

### Parameters

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Minimum</th>
<th>Typical</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source Current out of 0-10V Purple Wire</td>
<td>0 mA</td>
<td>—</td>
<td>2 mA</td>
</tr>
<tr>
<td>Absolute Voltage Range on 0-10V (+) Purple Wire</td>
<td>-2.0 V</td>
<td>—</td>
<td>+15 V</td>
</tr>
</tbody>
</table>

#### Typical Dimming Circuit

LED30W-XX-XXXX-D

Dim (+) Purple

IP710 Wall Dimmer

Dim (-) Pink

(Dimmer must be current-sink type control)

#### Output Current / 0-10VDC Dimming Input

<table>
<thead>
<tr>
<th>Dimming Input (Vdc)</th>
<th>Output Current %</th>
</tr>
</thead>
<tbody>
<tr>
<td>0V</td>
<td>0</td>
</tr>
<tr>
<td>1V</td>
<td>10</td>
</tr>
<tr>
<td>2V</td>
<td>20</td>
</tr>
<tr>
<td>3V</td>
<td>30</td>
</tr>
<tr>
<td>4V</td>
<td>40</td>
</tr>
<tr>
<td>5V</td>
<td>50</td>
</tr>
<tr>
<td>6V</td>
<td>60</td>
</tr>
<tr>
<td>7V</td>
<td>70</td>
</tr>
<tr>
<td>8V</td>
<td>80</td>
</tr>
<tr>
<td>9V</td>
<td>90</td>
</tr>
<tr>
<td>10V</td>
<td>100</td>
</tr>
</tbody>
</table>

Notes:

1. 0-10V dimmable version comes with an extra two wires +Purple/-Pink on the output side.
2. Compatible with most 0-10V Wall Slide dimmers and direct 0-10V analog signal. Recommended dimmer is Leviton IP710 or equivalent.
3. 0-10V dimmable version is not intended to dim below about 5% @ 0V or 10% @ 1.0V.
4. 0-10V dimmable version output will be 100% with Purple/Pink open and minimum with Purple/Pink shorted.
5. For units manufactured before Date of January 1<sup>st</sup> 2022, the Dim(-) wire will be gray, not pink.