

OPTOTRONIC®



Programmable Constant Current Outdoor Dimmable LED Power Supplies



The OPTOTRONIC programmable dimmable family consists of highly efficient, constant current LED power supplies for outdoor applications. One click programming through the OPTOTRONIC programmer allows OEMs to configure the output current with 1mA resolution. Also fully customizable by the OEM are the proprietary OSRAM AstroDIM and LEDset features. AstroDIM is autonomous dimming for night-time power reduction based on an internal timer that can be set for an entire year. The LEDset feature automatically sets the output current based on the module that is connected.

These power supplies are available in dimming to 10% with built-in 0-10V dimming, enables direct integration and operation with standard dimmers, sensors, as well as energy and light-management systems.

Key Features & Benefits

- OEM programmable with 1mA resolution to perfectly match LED load and maximize performance
- Dimming down to 10% on 0-10V dimmers
- Integrated OEM programmable features include
 - AstroDIM
 - LEDset
 - Constant lumen maintenance
 - LED thermal protection
- Programming doesn't require powering up or connecting the power supply to AC line voltage
- High levels of line transient protection for outdoor applications (6kV)
- UL Damp and Wet Rated
- IP66 Rated
- Available in both
 - Universal Input Voltage 120-277V_{AC} 50/60Hz
 - 347-480V_{AC} 50/60Hz

Product Offering

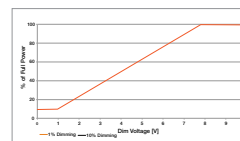
| Maximum Power | Input Voltage | Minimum Dimming | Output Current Range |
|---------------|---------------|-----------------|----------------------|
| 50W | 120-277V | 10% | 350 - 800mA |
| 50W | 120-277V | 10% | 600 - 1250mA |
| 50W | 120-277V | 10% | 1000 - 2100mA |
| 100W | 120-277V | 10% | 350 - 800mA |
| 100W | 120-277V | 10% | 600 - 1250mA |
| 100W | 347-480V | 10% | 350 - 800mA |
| 100W | 347-480V | 10% | 600 - 1250mA |
| 180W | 120-277V | 10% | 350 - 800mA |
| 180W | 120-277V | 10% | 600 - 1250mA |
| 180W | 347-480V | 10% | 350 - 800mA |
| 180W | 347-480V | 10% | 600 - 1250mA |

Configuration Overview

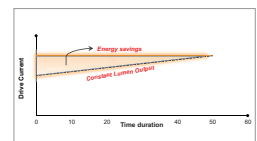
1. Program Units



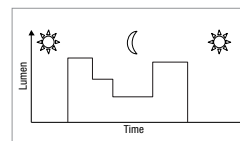
2. Configurable Features



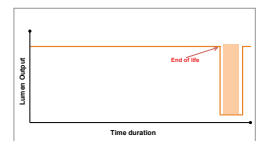
A. 0-10V Dimming



B. Constant Lumen Output



C. AstroDIM



D. End of Life Power Supply Indicator

Application Information

Applications

- Architectural building mounted
- Bollards
- Cobra heads
- Decorative landscape lighting
- Industrial high bay
- Mini wall packs
- Shoe box

Specifications and Certifications



Specification Data

| | |
|-------------|------|
| Catalog # | Type |
| Project | |
| Comments | |
| Prepared by | |

Electrical Specifications

| Maximum Output Power (W) | Nominal Input Voltage (V _{ac}) | Maximum Input Current (A) | Power Factor | THD | Line Transient | Efficiency | Environmental Rating | UL File # | Type TL | Type HL |
|--------------------------|--|----------------------------|--------------|------|----------------------------|------------|----------------------|-----------|---------|---------|
| 50W | 120-277VAC 50/60Hz | 0.52 @ 120V 0.22 @ 277V | >0.9 | <20% | ANSI C62.41 Category B 6kV | ≥85% | Damp & Wet | E320395 | Yes | Yes |
| 100W | 120-277VAC 50/60Hz | 0.95 @ 120V 0.40 @ 277V | >0.9 | <20% | ANSI C62.41 Category B 6kV | ≥90% | Damp & Wet | E320395 | Yes | Yes |
| 100W | 347-480VAC 50/60Hz | 0.95 @ 347V 0.40 @ 480V | >0.9 | <20% | ANSI C62.41 Category B 6kV | ≥90% | Damp & Wet | E320395 | Yes | Yes |
| 180W | 120-277VAC 50/60Hz | 1.70 @ 120V 0.75 @ 277V | >0.9 | <20% | ANSI C62.41 Category B 6kV | ≥92% | Damp & Wet | E320395 | Yes | Yes |
| 180W | 347-480VAC 50/60Hz | 0.60 @ 347V 0.44 @ 480V | >0.9 | <20% | ANSI C62.41 Category B 6kV | ≥91% | Damp & Wet | E320395 | Yes | Yes |

Ordering Information

| Item Number | Ordering Abbreviation | Total Output Power | Output Current Range | Default Current Setting | Output Voltage Range (V _{oc}) | Dimming Control | Dimming Range | LED Thermal Protection ¹ |
|-------------------------------|---------------------------------|--------------------|------------------------------|-------------------------|---|-----------------|---------------|-------------------------------------|
| Input Voltage 120-277V | | | | | | | | |
| 79370 | OT50W/UNV/800C/2DIMLT2/P6 | 50W | 350 - 800mA (Programmable) | 530mA | 30-120V | 0-10V | 10-100% | Yes |
| 79371 | OT50W/UNV/1250C/2DIMLT2/P6 | 50W | 600 - 1250mA (Programmable) | 700mA | 15-55V | 0-10V | 10-100% | Yes |
| 79278 | OTi50W/UNV/2100C/2DIMLT2/P6 | 50W | 1000 - 2100mA (Programmable) | 2000mA | 15-55V | 0-10V | 10-100% | Yes |
| 79368 | OT100W/UNV/800C/2DIMLT2/P6 | 100W | 350 - 800mA (Programmable) | 530mA | 50-185V | 0-10V | 10-100% | Yes |
| 79369 | OT100W/UNV/1250C/2DIMLT2/P6 | 100W | 600 - 1250mA (Programmable) | 700mA | 30-100V | 0-10V | 10-100% | Yes |
| 79366 | OT180W/UNV/800C/2DIMLT2/P6 | 180W | 350 - 800mA (Programmable) | 530mA | 82-280V | 0-10V | 10-100% | Yes |
| 79367 | OT180W/UNV/1250C/2DIMLT2/P6 | 180W | 600 - 1250mA (Programmable) | 700mA | 70-210V | 0-10V | 10-100% | Yes |
| Input Voltage 347-480V | | | | | | | | |
| 79206 | OT100W/347-480/800C/2DIMLT2/P6 | 100W | 350 - 800mA (Programmable) | 530mA | 50-185V | 0-10V | 10-100% | Yes |
| 79207 | OT100W/347-480/1250C/2DIMLT2/P6 | 100W | 600 - 1250mA (Programmable) | 700mA | 30-100V | 0-10V | 10-100% | Yes |
| 79208 | OT180W/347-480/800C/2DIMLT2/P6 | 180W | 350 - 800mA (Programmable) | 530mA | 82-280V | 0-10V | 10-100% | Yes |
| 79209 | OT180W/347-480/1250C/2DIMLT2/P6 | 180W | 600 - 1250mA (Programmable) | 700mA | 70-210V | 0-10V | 10-100% | Yes |

1. LED thermal protection is programmable.

Ordering Guide

| OT | 50W | / | UNV | / | 800C | / | 2DIM | / | LT2 | / | P6 |
|---|----------------|---|---|---|-----------------------------|---|---------------------------|---|----------|---|------|
| OT=OPTOTRONIC® OTi=OPTOTRONIC Intelligent | Output Wattage | | Input Voltage UNV=120-277V 347-480=347-480V | | Max. Output Current (mA) | | 0-10V Dimming AstroDIM | | LEDset 2 | | IP66 |

Accessories

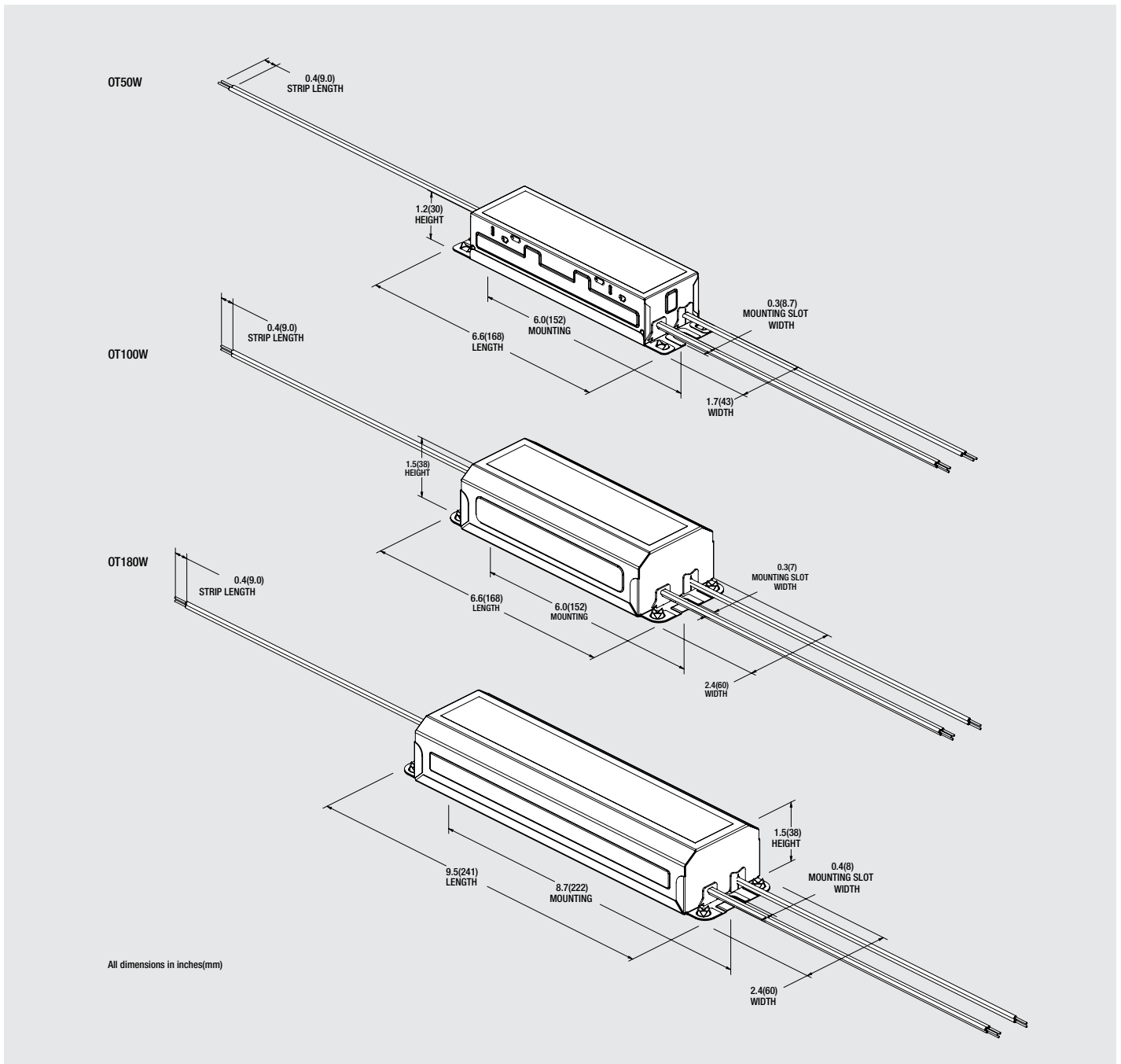


| Item Number | Ordering Abbreviation | Description | Required Accessory |
|-------------|-----------------------|--------------------------------------|--------------------|
| 51645 | OT Programmer | USB Programming Tool | Yes |
| 79360 | OTOutdoorPRGTool | Programming Tool for Outdoor Drivers | No |

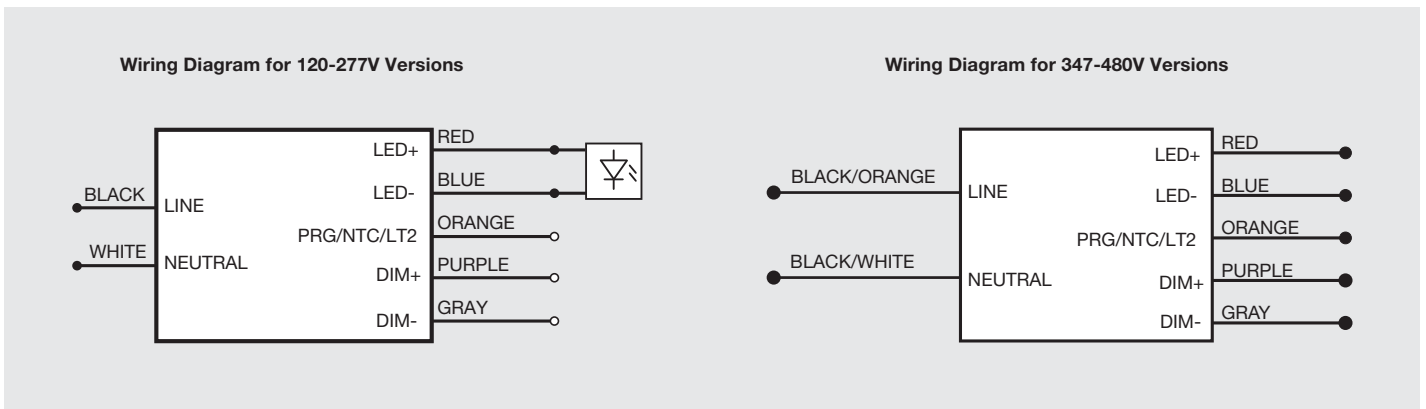
Minimum and Maximum Ratings

| Parameter | Values |
|---|--------------------------------|
| Input Voltage Range | 108 - 305V _{ac} |
| Maximum Case Temperature (T _c point) | 90°C (194°F) |
| Maximum Case Temperature for 5 year life and warranty | 85°C (185°F) |
| Ambient Operating Temperature (reference) | -40°C to 55°C (-40°F to 131°F) |
| Storage Temperature | 70°C Max (158°F) |
| Maximum Relative Humidity | 95% (Non-condensing) |

Assembly Diagram

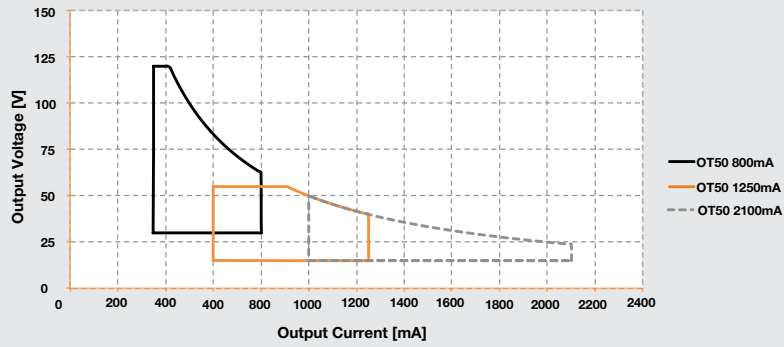


Wiring Diagram

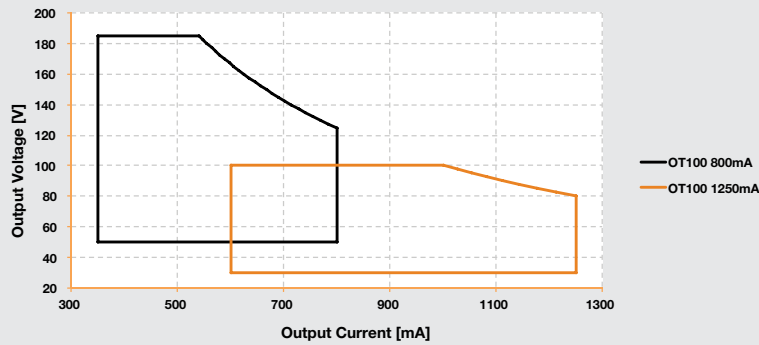


Operating Range

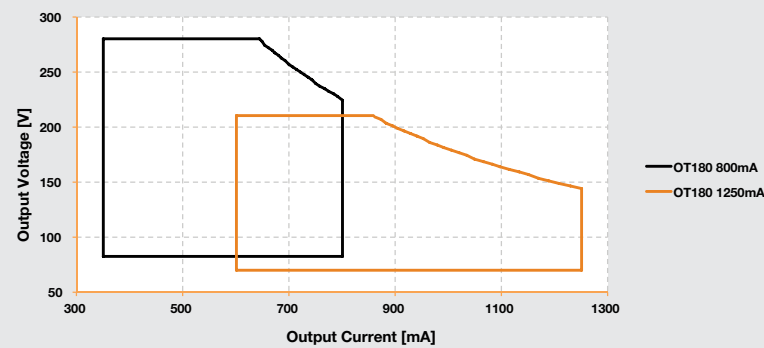
OT50



OT100



OT180



Packaging

OT50W

Quantity: 20 pieces per case
Weight: 0.9 lbs ea./18 lbs per case (approx.)

OT100W

Quantity: 20 pieces per case
Weight: 1.4 lbs ea./28 lbs per case (approx.)

OT180W

Quantity: 10 pieces per case
Weight: 2.2 lbs ea./22 lbs per case (approx.)

Warranty

OPTOTRONIC® Products are covered by our LED Module, OPTOTRONIC Power Supply or Control Warranty. For additional details, refer to the latest version of the warranty (LED089) available at www.osram-america.com.

OSRAM

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