

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

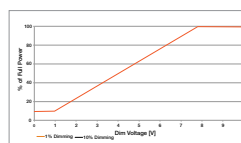
Maximum Power	Input Voltage	Minimum Dimming	Output Current Range
50W	120-277V	10%	350 - 800mA
50W	120-277V	10%	600 - 1250mA
50W	120-277V	10%	1000 - 2100mA
100W	120-277V	10%	350 - 800mA
100W	120-277V	10%	600 - 1250mA
100W	347-480V	10%	350 - 800mA
100W	347-480V	10%	600 - 1250mA
180W	120-277V	10%	350 -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

Configuration Overview

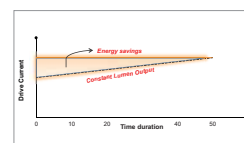
1. Program Units



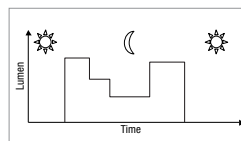
2. Configurable Features



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

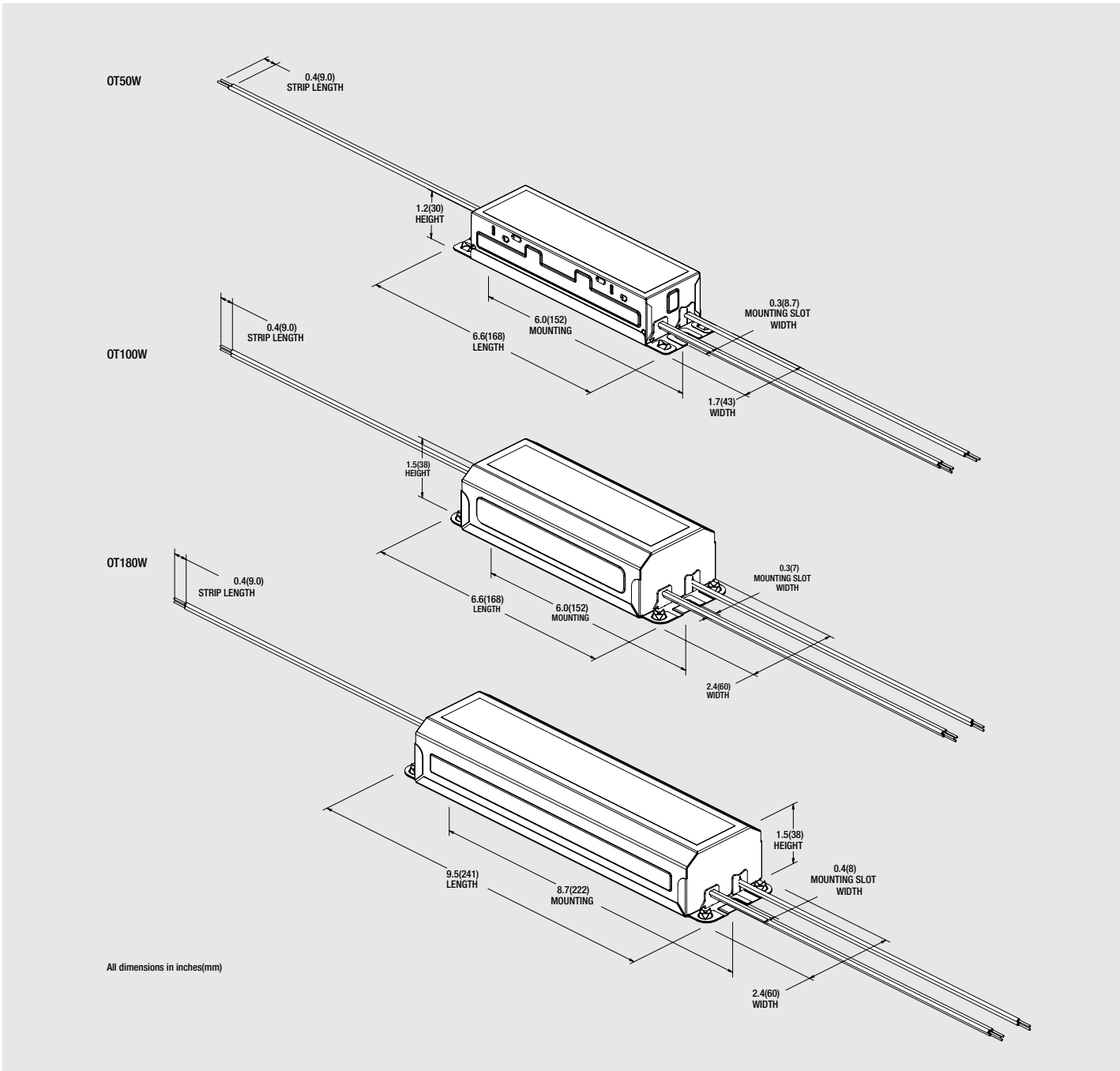


Item Number	Ordering Abbreviation	Description	Required Accessory
51645	OT Programmer	USB Programming Tool	Yes
79360	OTOutdoorPRGTool	Programming Tool for Outdoor Drivers	No

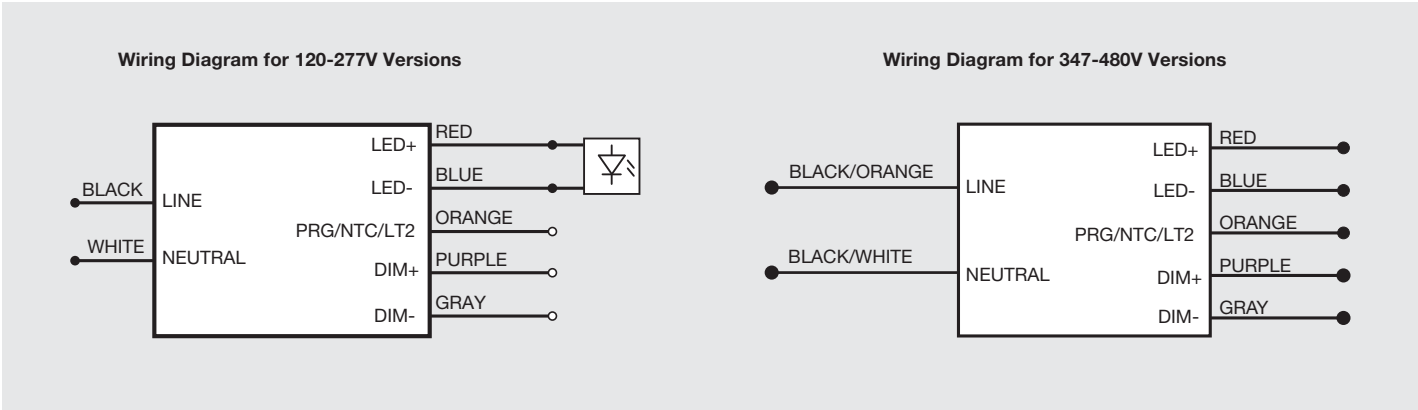
Minimum and Maximum Ratings

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

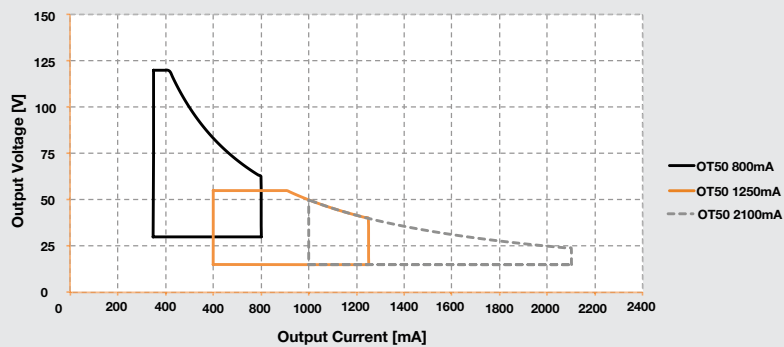


Wiring Diagram

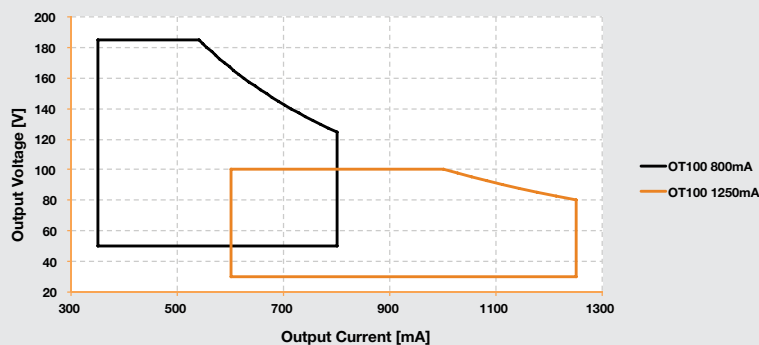


Operating Range

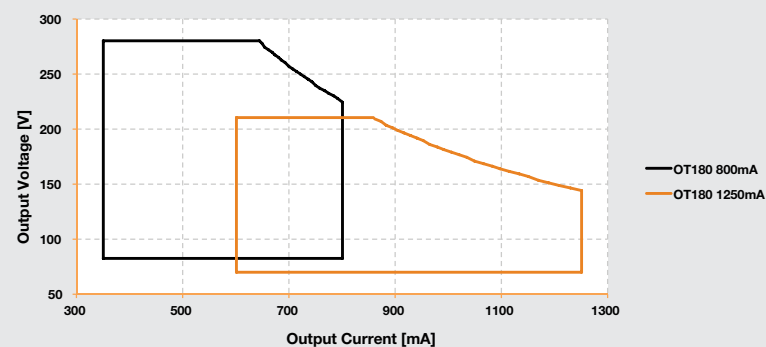
OT50



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-americas.com.

OSRAM

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