

Light is outstanding OPTOTRONIC®
LED Power Supplies

Light is OSRAM



OSRAM has been a leader in the lighting industry for over 100 years providing lighting solutions to meet all of our customers' needs. As the industry transitions to solid state lighting, we continue to expand our product portfolio with innovative LED power supplies for a wide variety of applications. Our experienced engineers develop products at the forefront of the industry for new luminaire designs. Over the years we've changed to reflect the markets we serve and the customers we reach.



10+ Years of Experience

Year 2012 marked the 10-year anniversary of OPTOTRONIC® Power Supplies powering LED systems across the globe. Over this decade, OPTOTRONIC LED Power Supplies have become the industry standard for robust performance, reliability and peace of mind.











A History of OPTOTRONIC Power Supplies

2002

OPTOTRONIC is born

First OPTOTRONIC 24V constant voltage power supply -OT75W

2003

First OPTOTRONIC Control Interfaces make dimming of LED lighting possible

2004

First OPTOTRONIC 10V constant voltage power supply -OT50W

2005

First OPTOTRONIC constant current power supply -OT9W/350C

2006

OSRAM's first outdoor rated power supplies -OT96W & OT240W

2007

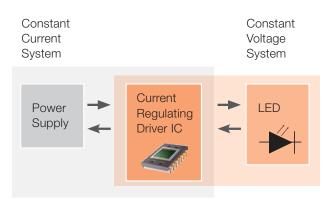
Thinnest LED power supply worldwide -OT50W/LP

Powerful, customized solutions you can depend on

The OPTOTRONIC® family of LED power supplies by OSRAM features a complete portfolio of constant voltage and constant current drivers in a variety of electrical configurations and form factors to suit your application space and system requirements.

All OPTOTRONIC power supplies and controls meet the highest industry standards for robust performance, reliability and peace of mind. Our drivers have powered LED systems across the globe for over 10 years and have the industry's finest 5 year warranty.

Constant Voltage LED Power Supplies are designed to be used with constant voltage type LED modules that employ an integrated current regulation on the LED board. Constant voltage based LED systems are ideal for linear and scalable applications, where flexibility is an important feature.



Constant Current LED Power Supplies for indoor and outdoor applications are designed to provide regulated current directly to the LED array. Doing so, these power supplies reduce the complexity in designing LED modules while maximizing system performance and efficacy. OSRAM constant current LED power supplies are configurable to precisely match the specific LED load and operating requirements.

Indoor LED Power Supplies

Optimized for:

- Accent lighting and downlight applications in a compact form factor
- Ambient lighting applications in a linear form factor
- Available with various industry popular dimming options to enable the applications control requirements.
 - 0-10V
 - StepDIM
 - Phase-cut

Outdoor LED Power Supplies

Family of outdoor drivers available in 50W, 100W, and 180W versions with dimming down to 10%. Loaded with features designed to meet the needs of a multitude of outdoor applications.

2008/2009

Most efficient constant current power supply in NAFTA Market – OTHE40W

First integrated dimmable power supply – OTHE40DIM

First OPTOTRONIC 12V constant voltage power supplies

2010

First UL Listed OPTOTRONIC power supply

2011

Smallest integrated dimmable power supply – OT96W/ DIM

2012

First 60W 12V power supply

2013

First production friendly programmable drivers - OT40W & OT25W

2014

First programmable outdoor power supplies

OPTOTRONIC® Programming



The family of OPTOTRONIC Programmable drivers offers OEM's a wide operating range ensuring a high degree of flexibility.

Features Include:



Constant Lumen Output (CLO)

Power supplies can be programmed to drive LED modules at a lower initial drive current and gradually increase over time to ensure constant lumen output of the modules.

End-of-Life Indicator

Power supplies can be programmed to indicate when the luminaire has reached end-of-life and needs to be upgraded/replaced.

LED Thermal Protection

Power supplies can be programmed to decrease current to the modules once they reach a certain temperature to ensure modules will not over heat.

Auxiliary Output

Available integrated programmable auxiliary output (12V, 20V, and 24V).

Architectural Features

Programmable features include Soft-Start and Dim-to-Off*



AstroDIM

Autonomous dimming without the need for an external control unit. The dimming is regulated by an integrated timer which adjusts the dimming profile over the entire year based on an internal adaptive algorithm.



LEDset

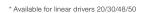
Analog interface that enables automatic output current setting for a LEDset compatible module.

Dimming

0-10V programmable dimming down to 1% or 10%.

Current Setting

Power supplies can be programmed within a 1mA resolution.

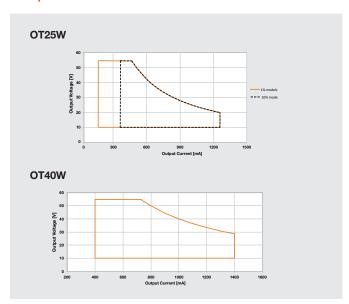




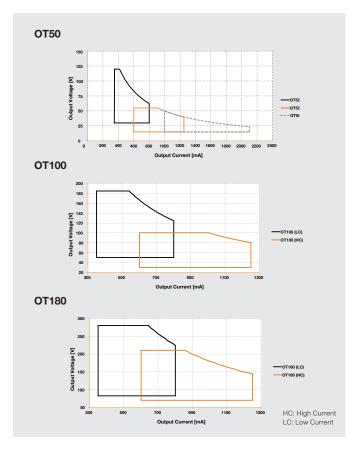
Programmable Output Ranges

Each model offers a wide output current range to meet all applications.

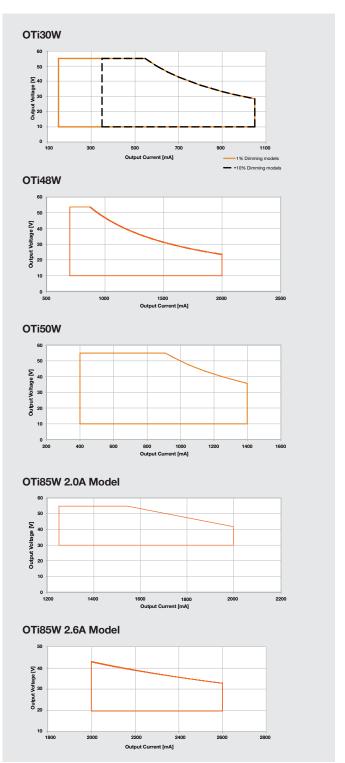
Compact



Outdoor



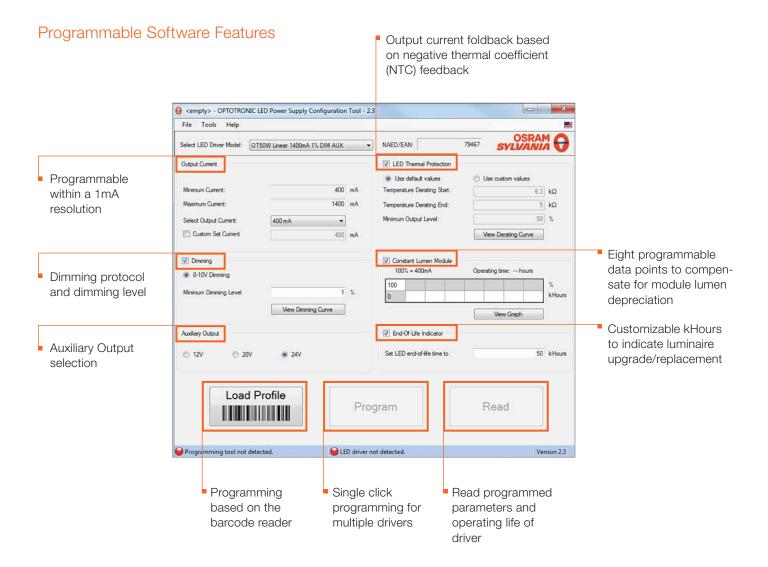
Linear



Software

Easily customize system performance

The OPTOTRONIC® programming software is available in the Tools and Resources section of www.osram-americas.com.



Additional Software Features

Data Logging

Creates a database of all programming activities, features and parameters; automatically linked to the individual LED power supply serial number. Useful for quality assurance, history or tracking purposes.

Production Mode

Restricted software environment. User can program drivers with pre-set profiles, but cannot modify any parameters or features. Profiles can be sourced from local, shared, or network locations.

Tools

Item	Ordering		Required
Number	Abbreviation	Description	Accessory
51645	OT Programmer	USB Programming Tool	Yes
51646	OT Programming Nest	Compact Programming Tool	No
51647	OTLinearHandheldPRGtool	Linear Programming Tool	No
51648	OTLinearAutoPRGTool	Linear Auto Programming Tool	No
79360	OTOutdoorPRGTool	Outdoor Programming Tool	No











USB Programming Tool

Compact Programming Tool

Linear Programming Tool

Linear Auto Programming Tool

Outdoor Programming Tool

Warranty

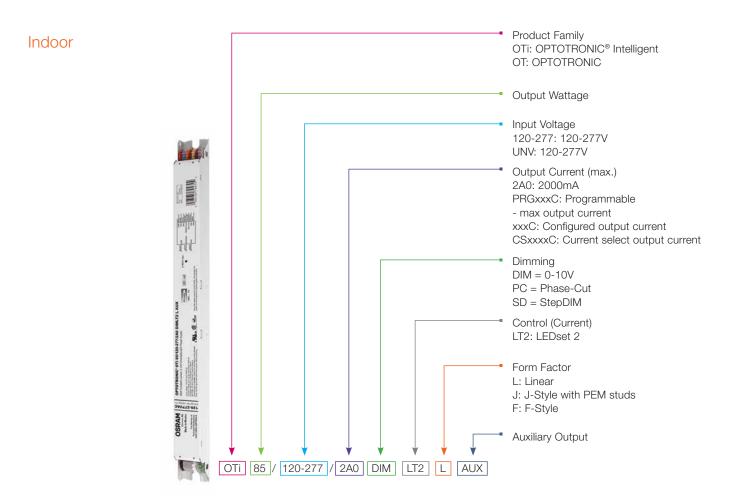
OSRAM is committed to producing the highest quality of products. Therefore, OSRAM offers to replace any OPTOTRONIC® driver that may fail within 5 years from the date of installation. Please reference the terms and conditions section of the warranty for complete details. Programming accessories for the OPTOTRONIC family of products have an OSRAM 90 day warranty.



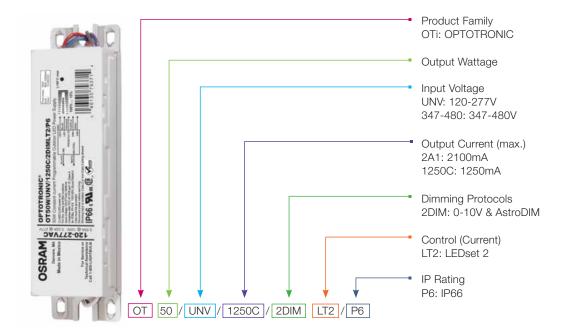
For more detailed information please visit www.osram-americas.com/warranty



Ordering Guide









Programmable Compact Constant Current Dimmable LED Power Supplies



Features and Benefits

- OEM programmable with 1 mA resolution to perfectly match LED load and maximize performance
- Wide output current and voltage range
- Available in dimming to 1% or 10% with 0-10V dimmers
- Integrated, customer configurable, LED thermal protection feature
- Familiar standard industry housing 5.0" x 2.4" x 1.2" $(L \times W \times H)$
- Available with mounting feet (F-style) or PEM studs (J-style) to simplify installation
- Universal Input Voltage 120-277Vac 50/60Hz
- UL Class 2 output for safe operation















Compliant to 47 CFR, Part 15 Class A

OT40 Item Number	Ordering Abbreviation	Total Output Power	Output Current Range ²	Default Current	Output Voltage Range (Voc)	Dimming Control	Dimming Range	LED Thermal Protection	Housing Type
79441	OT40W/PRG1400C/UNV/DIM-1/J	40W	400-1400 mA (programmable)	700mA	10-55V	0-10V	1-100%	Yes	J-Style
79442	OT40W/PRG1400C/UNV/DIM-1	40W	400-1400 mA (programmable)	700mA	10-55V	0-10V	1-100%	Yes	F-Style
79449	OT40W/PRG1400C/UNV/DIM/J	40W	400-1400 mA (programmable)	700mA	10-55V	0-10V	10-100%	Yes	J-Style
79448	OT40W/PRG1400C/UNV/DIM	40W	400-1400 mA (programmable)	700mA	10-55V	0-10V	10-100%	Yes	F-Style

OT25 Item Number	Ordering Abbreviation	Total Output Power	Output Current Range ²		Output Voltage Range (Vpc)	Dimming Control	Dimming Range	LED Thermal Protection	Housing Type
79406 ³	OT25W/PRG1250C/UNV/DIM-1/J	25W	150-1250 mA (programmable) ¹	500mA	10-55V	0-10V	1-100%	Yes	J-Style
79405 ³	OT25W/PRG1250C/UNV/DIM-1	25W	150-1250 mA (programmable)1	500mA	10-55V	0-10V	1-100%	Yes	F-Style
79404	OT25W/PRG1250C/UNV/DIM/J	25W	350-1250 mA (programmable)	500mA	10-55V	0-10V	10-100%	Yes	J-Style
79403	OT25W/PRG1250C/UNV/DIM	25W	350-1250 mA (programmable)	500mA	10-55V	0-10V	10-100%	Yes	F-Style

^{1.} Output current below 350mA is in PWM mode.
2. The lowest output current of the driver is 14mA and the minimum percentage of dimming is dependent on the programmed output current of the driver for 1% models.
3. 79405 and 79406 will dim down to 10% only when operating under 350mA.

Constant Current Phase-Cut Dimmable LED Power Supplies



Features and Benefits

- Wide selection of pre-configured drive currents between 250mA and 700mA
- Compact form factor, ideal for sleek fixture designs
- Broad ambient operating range for use in extreme application conditions
- High power factor and efficiency
- Available in two housing styles F-Style and J-Style with PEM studs
- Short circuit, open circuit, overload and overheat protection for sustained performance
- Integrated phase-cut dimming compatible with both Leading Edge (incandescent) and Trailing Edge (ELV) phase-cut type dimmers
- UL Class 2 output for safe operation

Specifications and Certifications









FCC 47CFR Part 15 Class B Compliant

Item	Ordering	Max. Output	Output	Output Voltage	Housing
Number	Abbreviation	Power (W)	Current (mA)	Range (VDC)	Туре
79423	OT20W/350C/UNV/PC	20	350	28-55	F-Style
79428	OT20W/350C/UNV/PC/J	20	350	28-55	J-Style
79422	OT20W/400C/UNV/PC	20	400	28-50	F-Style
79427	OT20W/400C/UNV/PC/J	20	400	28-50	J-Style
79421	OT20W/500C/UNV/PC	20	500	28-40	F-Style
79426	OT20W/500C/UNV/PC/J	20	500	28-40	J-Style
79420	OT20W/700C/UNV/PC	20	700	16-29	F-Style
79425	OT20W/700C/UNV/PC/J	20	700	16-29	J-Style
79429	OT18W/600C/UNV/PC	18	600	20-30	F-Style
79424	OT18W/600C/UNV/PC/J	18	600	20-30	J-Style
79419	OT15W/500C/UNV/PC	15	500	18-30	F-Style
79418	OT15W/500C/UNV/PC/J	15	500	18-30	J-Style
79412	OT13W/250C/UNV/PC	13	250	28-55	F-Style
79413	OT13W/250C/UNV/PC/J	13	250	28-55	J-Style
79375	OT12W/400C/UNV/PC	12	400	18-30	F-Style
79374	OT12W/400C/UNV/PC/J	12	400	18-30	J-Style



Linear Programmable Constant Current Dimmable LED Power Supplies



Features and Benefits

- OEM Programmable with 1mA resolution to perfectly match LED load and maximize performance
- Integrated OEM programmable features include:
 - Constant lumen maintenance
 - End of life indication
 - LED thermal protection
- Programming doesn't require powering up or connecting the power supply to AC line voltage
- Specification grade dimming down to 1% or 10% on 0-10V dimmers
- Auxiliary output to power 12V, 20V, and 24V low power applications
- Euro-style traditional form factor 11" \times 1.2" \times 1.0" (L \times W \times H)
- Universal input voltage 120-277Vac 50/60Hz
- UL Class 2 output for safe operation

Specifications and Certifications









ltem Number	Ordering Abbreviation	Total Output Power	Output Current Range¹	Default Current	Output Voltage Range (Voc)	Dimming Control	Dimming Range	LED Thermal Protection
OTi85							-	
79470	0Ti85/120-277/2A0 DIM LT2 L	85W	1250-2000mA (programmable)	2000mA	30-55V	0-10V	10-100%	Yes
79471	0Ti85/120-277/2A6 DIM LT2 L	85W	2000-2600mA (programmable)	2600mA	20-55V	0-10V	10-100%	Yes
0Ti50								
79467	OTi50/120-277/1A4 DIM-1 L AUX	50W	400-1400mA (programmable)	1050mA	10-55V	0-10V	1-100%	Yes
79398	0Ti50/120-277/1A4 DIM L AUX	50W	400-1400mA (programmable)	1050mA	10-55V	0-10V	10-100%	Yes
<u>79516</u>	0Ti50/120-277/1A4 DIM-1 L	50W	400-1400mA (programmable)	1050mA	10-55V	0-10V	1-100%	Yes
79631	0Ti50/120-277/1A4 DIM L	50W	400-1400mA (programmable)	1050mA	10-55V	0-10V	10-100%	Yes
<u>0Ti48</u>								
<u>79468</u>	0Ti48/120-277/2A0 DIM-1 L AUX	48W	700-2000mA (programmable)	1400mA	10-55V	0-10V	1-100%	Yes
79399	0Ti48/120-277/2A0 DIM L AUX	48W	700-2000mA (programmable)	1400mA	10-55V	0-10V	10-100%	Yes
<u>79517</u>	0Ti48/120-277/2A0 DIM-1 L	48W	700-2000mA (programmable)	1400mA	10-55V	0-10V	1-100%	Yes
79632	0Ti48/120-277/2A0 DIM L	48W	700-2000mA (programmable)	1400mA	10-55V	0-10V	10-100%	Yes
0Ti30								
79466	OTi30/120-277/1A0 DIM-1 L AUX	30W	150-1050mA ² (programmable)	700mA	10-55V	0-10V ³	1-100%	Yes
79397	0Ti30/120-277/1A0 DIM L AUX	30W	350-1050mA (programmable)	700mA	10-55V	0-10V	10-100%	Yes
<u>79515</u>	0Ti30/120-277/1A0 DIM-1 L	30W	150-1050mA ² (programmable)	700mA	10-55V	0-10V	1-100%	Yes
79630	0Ti30/120-277/1A0 DIM L	30W	350-1050mA (programmable)	700mA	10-55V	0-10V	10-100%	Yes
0Ti20								
79532	OTi20/120-277/0A7 DIM-1 L AUX	20W	150-700mA (programmable)	500mA	10-55V	0-10V	1-100%	Yes
79533	0Ti20/120-277/0A7 DIM L AUX	20W	150-700mA (programmable)	500mA	10-55V	0-10V	10-100%	Yes
79535	0Ti20/120-277/0A7 DIM-1 L	20W	150-700mA (programmable)	500mA	10-55V	0-10V	1-100%	Yes
79534	OTi20/120-277/0A7 DIM L	20W	150-700mA (programmable)	500mA	10-55V	0-10V	10-100%	Yes

Default output current : 50W- 1050mA, 48W- 1400mA, 30W- 700mA, 79470 - 2.0A and 79471 - 2.6A.
 Output current below 350mA is in PWM mode (not applicable for OTi85W).
 79466 will dim down to 10% only when operating under 350mA (not applicable for OTi85W).

Linear Constant Current Step-Dimmable LED Power Supplies



Features and Benefits

- Five fixed output current options per model for simple output flexibility
- Step-DIM 100-50%
- Two hot wires neutral and ground
- Traditional form factor 11" x 1.2" x 1.0" (L x W x H)
- Universal input voltage 120-277Vac 50/60Hz
- UL Class 2 output for safe operation

Specifications and Certifications





Item	Ordering	Max. Output	Output Current	Output Voltage	Dimming	Dimming
Number	Abbreviation	Power (W)	Range (mA)	Range (VDC)	Control	Range
79376	OT30W/CS1050C/UNV/SD/L	30	250, 350, 500, 700, 1050	25-55	Step-DIM	50/100%
79377	OT50W/CS1400C/UNV/SD/L	50	700, 800, 1050, 1250, 1400*	25-55	Step-DIM	50/100%

^{*} For 1400mA output, the max output power is 47W and the output voltage is 33V.









Programmable Constant Current Outdoor Dimmable LED Power Supplies



Features and 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
- UL Damp and Wet Rated
- IP66 Rated
- Available in both
 - Universal Input Voltage 120-277Vac 50/60Hz
 - -347-480Vac 50/60Hz

Specifications and Certifications













Innovation Award winner

Orderi	ng Information							
Item Number	Ordering Abbreviation	Total Output Power	Output Current Range	Default Current Setting	Output Voltage Range (Voc)	Dimming Control	Dimming Range	LED Thermal Protection ¹
Input Volt	tage 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 Volt	tage 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.

Constant Current LED Power Supplies



Features and Benefits

- Damp rated designs available for use in outdoor applications
- Traditional T8 small can housing
- Suitable for use with occupancy sensors
- Range of constant current outputs available for a variety of LED array designs
- Integrated dimming (select models)

Specifications and Certifications





Ordering Information

Item	Ordering	Nominal Input Voltage	Nominal Input Current	Power	Output Current	Maximum Output Voltage	Output Power Range	Dimming	Control	UL	Location
Number	Abbreviation	(V)	(A)	Factor	(mA)	(VDC)	(W)	Range	Voltage	File #	Rating
51629*	OT100W/4100C/UNV/DIM	120 277	1.2 0.6	>0.90	4100	15-24	100	10-100%	0-10Vpc	E320395	Dry & Damp
51628	OT100W/4100C/UNV	120 277	1.2 0.6	>0.90	4100	15-24	100	_	_	E320395	Dry & Damp

*Dimmable

Notes:

Use 0-10V controller for dimming.

Remote Mounting: 16 ft. Although it is possible to exceed the remote mounting distances given, the installer and/or end user must take precautions to prevent and/or test the effects of EMI (electromagnetic interference)



Constant Voltage **LED Power Supplies**



Features and Benefits

- Damp-rated designs available for use in outdoor applications
- Wide input voltage range: 120-277Vac (select models)
- Broad ambient temperature range for use in extreme application conditions
- Electronically stabilized output voltage with low line ripple
- Integrated dimming (select models)
- Short circuit, overload and overheat protection for sustained performance
- High power factor and efficiency
- Enclosures for variety of applications and fixture designs
- UL Class 2 output for safe operation
- Exceptional line and load regulation

Specifications and Certifications











Ordering Information

Item Number	Ordering Abbreviation	Nominal Input Voltage (V)	Nominal Input Current (A)	Power Factor	Nominal Input Power (W)	Output Voltage (Voc)*	Output Power Range (W)	Max. Line Ripple (V)	UL File #	Location Rating
12V LED P	ower Supplies									
51604	0T20W/12V/UNV	120 277	0.27 0.17	> 0.9	25	12	0.1-20	±1.0	E320395	Damp
51632	0T60W/12V/UNV	120 277	0.60 0.26	0.99	71	12	1-60	±1.0	E320395 E258264	Damp
24V LED P	Power Supplies									
51804	OT20W/24V/UNV	120 277	0.27 0.17	> 0.9	25	24	0.1-20	±1.0	E320395	Damp
51598	0T50W/24V/120V/LP	120	0.47	0.99	56	24	0.9-50	±0.2	E248522	Dry
51514	0T75W/24V/UNV	120 277	0.76 0.33	0.99	90	24	0.9-75	±0.2	E258264	Damp
51522	0T96W/24V/UNV	120 277	0.97 0.39	0.9	107	24	1-96	±1.0	E320395	Damp
51626	OT96W/24V/UNV/JBX	120 277	0.91 0.39	0.99	108	24	0.8-96	±1.0	E320395 UL Listed	Wet**cULus
51627	0T240W/3x24V/120-240V/JBX	120 240	2.39 1.19	0.99	285	24	0.8-240	±1.0	E320395 UL Listed	Wet** cUL us
	Nomina	al Nominal	Nomi	nal	Output	Max.				

Output

Voltage

(VDC)*

12

Power

Range

(W)

1-60

1-96

Line

(V)

+1.0

±1.0

Ripple

Dimming

Mode

PWM

PWM

Dimming

Control

0-10Vpc

0-10Vpc

Dimming

10-100%

10-100%

UL File #

E320395

E258264

E320395

Range

Input

Power

(W)

71

107

Ordering

Abbreviation

OT60W/12V/UNV/DIM

OT96W/24V/UNV/DIM

Item

Number

51633

51520

Input

(A)

0.60

0.26

0.97

0.39

Current Power

Factor

0.99

0.9

Input

(V) 120

277

120

Voltage

Location

Rating

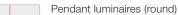
Damp

Damp

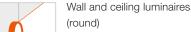
Note:
1. All power supples can be remotely mounted up to 32 feet. Although it is possible to exceed the remote mounting distance, the installer and/or end user must take precautions to prevent and/or test the effects of EMI (electromagnetic interference).

Where can OPTOTRONIC® compact drivers be used?













Home and decorative lighting



Spotlights



5

Downlights

Optimally paired with high efficiency PrevaLED® Spot and Downlight modules



PrevaLED Core PrevaLED Core Style



PrevaLED Cube DC



PrevaLED COIN 50

Where can OPTOTRONIC® linear drivers be used?







Surface-mounted luminaires





Wall and ceiling luminaires





Recessed luminaires

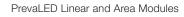




Industrial luminaires

Optimally paired with PrevaLED® Linear and Area modules







PrevaLED Flex Linear

Where can OPTOTRONIC® outdoor drivers be used?





Bollard luminaires





Wallpack luminaires





Area light luminaires





Industrial highbay Iuminaires





Cobrahead luminaires





Hazardous location luminaires

Optimally paired with PrevaLED® outdoor modules



PrevaLED Compact Z2

OSRAM

Americas Headquarters

OSRAM SYLVANIA Inc. 200 Ballardvale Street Wilmington, MA 01887 USA

Phone 1-800-LIGHTBULB (1-800-544-4828)

www.osram-americas.com

OSRAM and SYLVANIA are registered trademarks.

All other trademarks are those of their respective owners.

Photographs are exemplary of possible applications for the LEDs and not photographs depicting the LEDs in use.

Specifications subject to change without notice.

