

OPTOTRONIC®



Programmable Linear Constant Current Dimmable LED Power Supplies



The OPTOTRONIC programmable dimmable consists of highly efficient, constant current LED power supplies. One click programming through the OPTOTRONIC programmer allows OEMs to configure the output current with 1mA resolution. Also fully customizable by customers are the end of life indicator, LED thermal protection and the constant lumen maintenance features. The OPTOTRONIC programmer does not require the power supply to be powered up or connected to AC line voltage while programming. The power supplies are available in dimming to 1% or 10% with built-in 0-10V dimming enabling 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
- 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" x 1.2" x 1.0" (L x W x H)
- Universal input voltage— 120-277V_{AC} 50/60Hz
- UL Class 2 output for safe operation

Product Offering

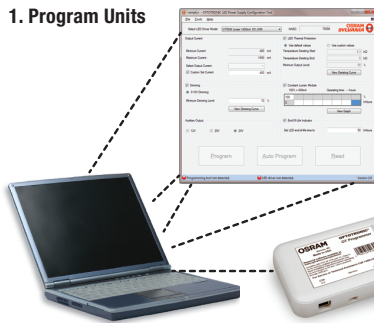
Maximum Power	Minimum Dimming ²	Output Current Range
50W	1% 10%	400 - 1400mA
48W	1% 10%	700 - 2000mA
30W	1% 10%	150 - 1050mA ¹

1. 10% dimming model output current range is 350-1050mA

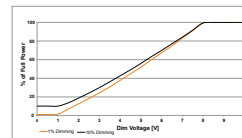
2. The lowest output current of these drivers is 14mA and the minimum percentage of dimming is dependent on the programmed output current of the driver.

Configuration Overview

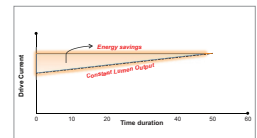
1. Program Units



2. Configurable Features



A. 0-10V Dimming



B. Constant Lumen Output



C. Auxiliary Output



D. End of Life Power Supply Indicator

Application Information

Applications

- Indirect/direct
- Linear
- Recessed troffer

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	Maximum Auxiliary Output Current** (mA)	Auxiliary Output Voltage (V _{oc})*	Environmental Rating	UL File #
30W	120-277V _{AC} 50/60 Hz	0.31 @ 120V 0.15 @ 277V	>0.9	<20%	ANSI C62.41 Cat.A 2.5kV	>85%	40	12/20/24	Dry & Damp	E320395
48W	120-277V _{AC} 50/60 Hz	0.52 @ 120V 0.23 @ 277V	>0.9	<20%	ANSI C62.41 Cat.A 2.5kV	>85%	40	12/20/24	Dry & Damp	E320395
50W	120-277V _{AC} 50/60 Hz	0.52 @ 120V 0.24 @ 277V	>0.9	<20%	ANSI C62.41 Cat.A 2.5kV	>85%	40	12/20/24	Dry & Damp	E320395

*Configurable using OT Programming tool

**Only for models with Aux output

Ordering Information

Item Number	Ordering Abbreviation	Total Output Power	Output Current Range ¹	Output Voltage Range (V _{oc})	Dimming Control	Dimming Range	LED Thermal Protection
OT50							
79467	OT50W/PRG1400C/UNV/DIM-1/L AUX	50W	400 - 1400mA (programmable)	10-55V	0-10V	1-100%	Yes
79398	OT50W/PRG1400C/UNV/DIM/L AUX	50W	400 - 1400mA (programmable)	10-55V	0-10V	10-100%	Yes
79631	OT50W/PRG1400C/UNV/DIM/L	50W	400 - 1400mA (programmable)	10-55V	0-10V	10-100%	Yes
OT48							
79468	OT48W/PRG2000C/UNV/DIM-1/L AUX	48W	700 - 2000mA (programmable)	10-55V	0-10V	1-100%	Yes
79399	OT48W/PRG2000C/UNV/DIM/L AUX	48W	700 - 2000mA (programmable)	10-55V	0-10V	10-100%	Yes
79632	OT48W/PRG2000C/UNV/DIM/L	48W	700 - 2000mA (programmable)	10-55V	0-10V	10-100%	Yes
OT30							
79466 ³	OT30W/PRG1050C/UNV/DIM-1/L AUX	30W	150 - 1050mA ² (programmable)	10-55V	0-10V	1-100%	Yes
79397	OT30W/PRG1050C/UNV/DIM/L AUX	30W	350 - 1050mA (programmable)	10-55V	0-10V	10-100%	Yes
79630	OT30W/PRG1050C/UNV/DIM/L	30W	350 - 1050mA (programmable)	10-55V	0-10V	10-100%	Yes

1. Default output current : 50W- 1050mA , 48W- 1400mA and 30W- 700mA.

2. Output current below 350mA is in PWM mode.

3. 79466 will dim down to 10% only when operating under 350mA.

Ordering Guide

OT	50W	/	PRG	1400C	/	UNV	/	DIM-1	/	L	AUX
OPTOTRONIC®	Output Wattage		Programmable	Max. Output Current (mA)		Input Voltage (120-277V)		0-10V Dimmable DIM-1 – 1% DIM DIM – 10% DIM		Linear	Auxiliary Output

Accessories

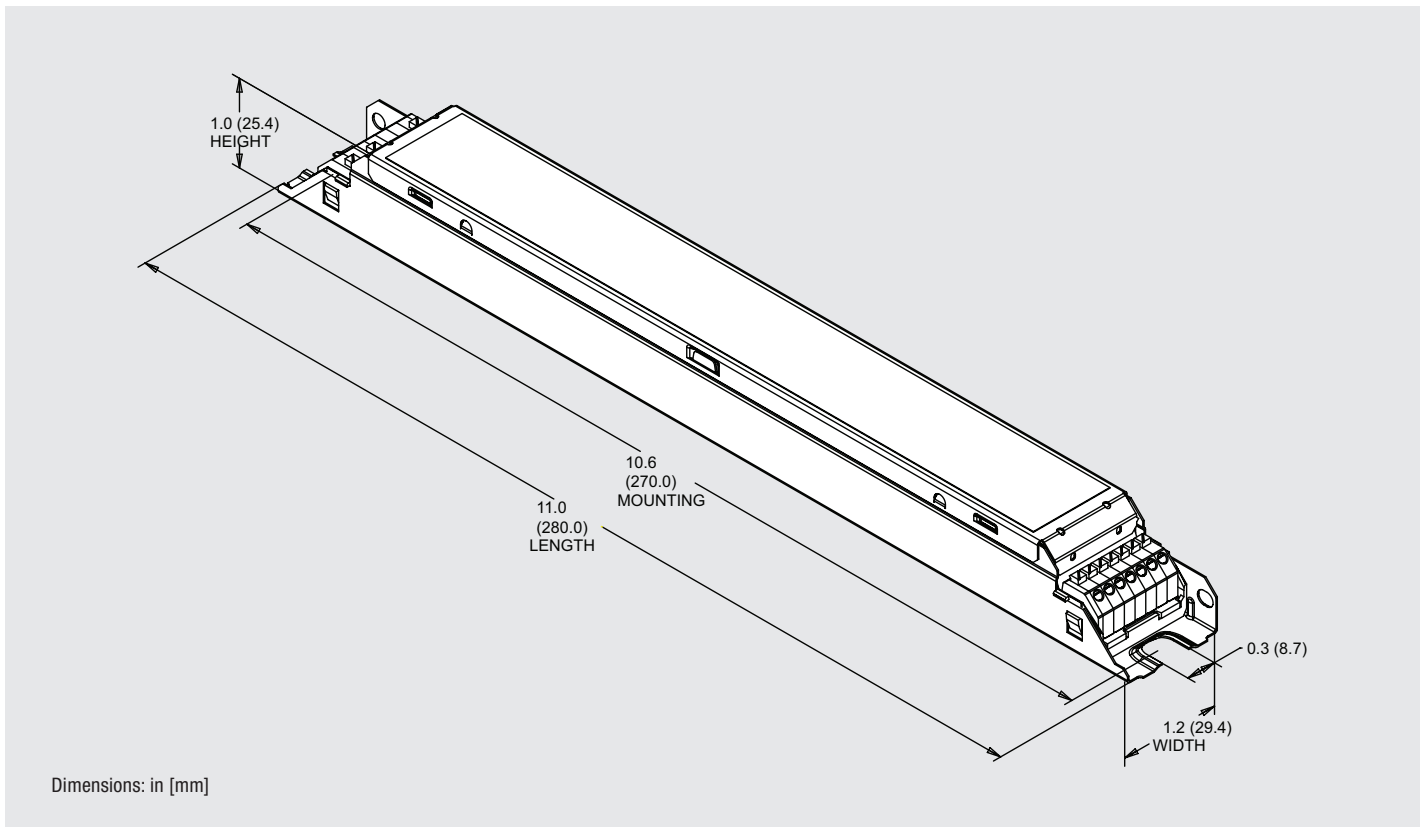


Item Number	Ordering Abbreviation	Description	Required Accessory
51645	OT Programmer	USB Programming Tool	Yes
51647	OTLinearHandheldPRGtool	Programming Tool	No
51648	OTLinearAutoPRGTool	Programming Tool	No

Minimum and Maximum Ratings

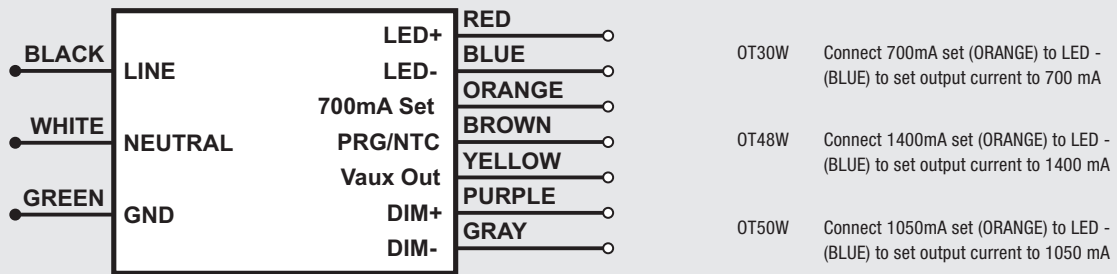
Parameter	Values
Input Voltage Range	108 - 305V _{AC}
Maximum Case Temperature (T _c point)	90°C (194°F)
Maximum Case Temperature for 5 year life and warranty	75°C (165°F)
Ambient Operating Temperature (reference)	-30°C to 50°C (-22°F to 122°F)
Storage Temperature	70°C Max (150°F)
Maximum Relative Humidity	85% (Non-condensing)

Assembly Diagram

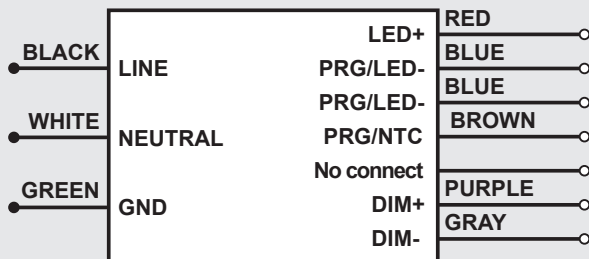


Wiring Diagram

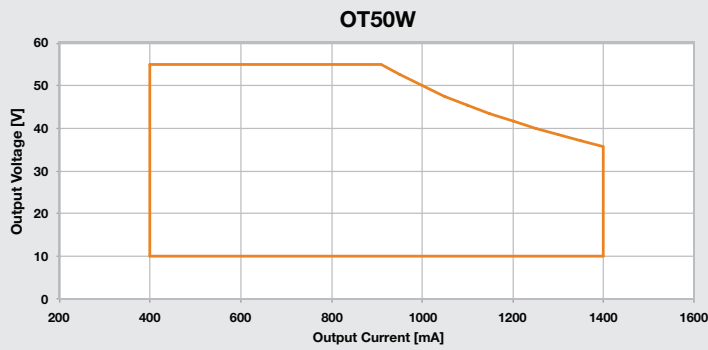
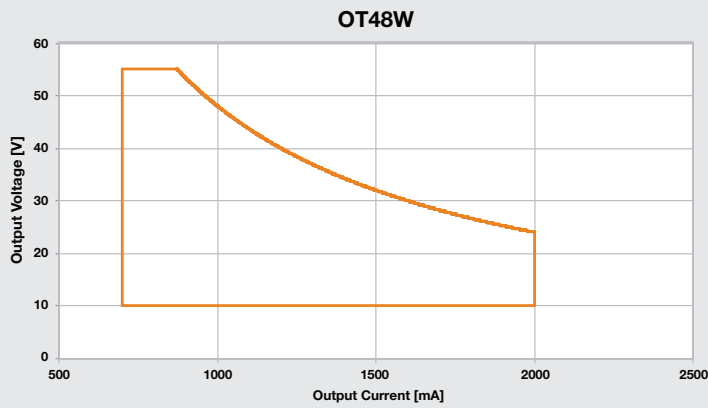
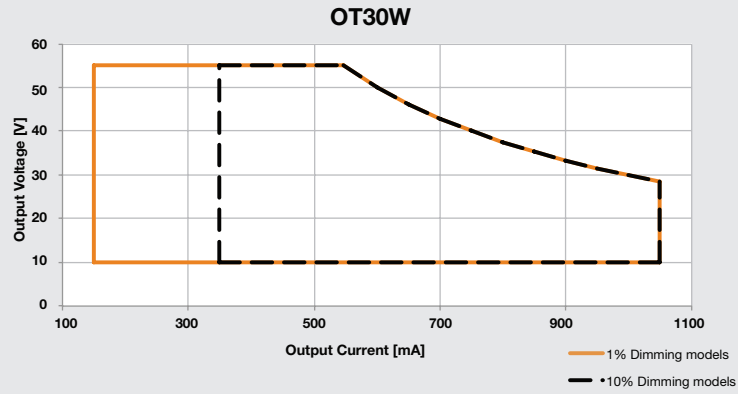
Wiring diagram for AUX output models



Wiring diagram for 79630, 79631 and 79632



Operating Range



Packaging

Quantity: 10 pieces per case
Weight: 0.5 lbs ea./5 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.