

OPTOTRONIC®

Programmable Compact Constant Current Dimmable LED Power Supplies



The OPTOTRONIC programmable dimmable family consists of highly efficient, constant current 25W, 40W and 55W LED power supplies. They are custom programmable between the range of 150 to 1250mA for the 25W; 400 to 1400mA for the 40W; and 700 to 2000mA for the 55W with a 1mA resolution. 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% with built-in 0-10V dimming enabling direct integration and operation with standard dimmers, sensors, as well as energy and light-management systems. In case of LED module thermal overload, the family's integrated LED thermal protection function allows the power supply to reduce the output current. This function is fully customizable by the customer. The family comes in a standard industry housing with dual entry connectors to simplify installation.

Dedicated auxiliary DC output helps integration of fixture integrated sensors like the OSRAM Connected Lighting Module (CLM) DIM thus eliminating need of secondary DC supply.

Application Information

Applications

- Downlights
- In-grade fixtures
- Recessed troffer
- Wall washing

Key Features & Benefits

- Universal Input Voltage
 - 120-277V_{AC} 50/60Hz
 - 347V_{AC} 50/60Hz
- UL Class 2 output for safe operation
- Protection against line voltage on 0-10V dimming wires
- AUX Output models available
- Custom programmable with 1mA resolution to perfectly match LED load and maximize performance
- Programming does not require powering up or connecting the power supply to AC line voltage
- Wide output current and voltage range
- Available in dimming to 1% with 0-10V dimmers
- Integrated OEM programmable features include:
 - Constant lumen maintenance
 - End-of-life indication
 - LED thermal protection
 - Vaux (12V/20V/24V)
 - Soft start
 - Dim-to-Off
- Familiar standard industry housing – 5.0" x 2.4" x 1.1" (L x W x H)
- Available with mounting feet (F-style) or PEM studs (J-style) to simplify installation

Product Offering

Max. Power	Housing Type	Connectors	Minimum Dimming	Output Current Range	Dedicated Aux ³ 12V/20V/24V
25W	F-style ¹	Dual Entry	1%	150–1250mA	Yes
25W	J-style ²	Bottom Feed	1%	150–1250mA	Yes
40W	F-style ¹	Dual Entry	1%	400–1400mA	Yes
40W	J-style ²	Bottom Feed	1%	400–1400mA	Yes
55W	F-style ¹	Dual Entry	1%	700–2000mA	Yes
55W	J-style ²	Bottom Feed	1%	700–2000mA	Yes

¹ feet
² PEM stud
³ 1W max

Specifications and Certifications



Compliant to 47 CFR, Part 15 Class A
 Compliant to UL STD 60730-1 for SREC
 Compatible with CA T-24 requirement for flicker and startup time



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 #
25W	120-277V _{AC} 50/60 Hz	0.26A @ 120V 0.12A @ 277V	>0.9	<20%	NEMA SSL1-2010	87%	Damp/Dry	E320395
25W	347V _{AC} 50/60 Hz	0.105 @ 347V	>0.9	<20%	NEMA SSL1-2010	85%	Damp/Dry	E320395
40W	120-277V _{AC} 50/60 Hz	0.41A @ 120V 0.18A @ 277V	>0.9	<20%	NEMA SSL1-2010	87%	Damp/Dry	E320395
40W	347V _{AC} 50/60 Hz	0.155 @ 347V	>0.9	<20%	NEMA SSL1-2010	87%	Damp/Dry	E320395
55W	120-277V _{AC} 50/60 Hz	0.6A @ 120V 0.26A @ 277V	>0.9	<20%	NEMA SSL1-2010	89%	Damp/Dry	E320395

Ordering Information

Item Number	Ordering Abbreviation	Total Output Power	Output Current Range	Default Current	Output Voltage Range (V _{oc})	Dimming Control	Dimming Range	LED Thermal Protection	Housing Type
120-277V									
57347	OTi25W/120-277/1A2/DIM-1	25W	150-1250mA (Programmable)	500mA	8-55V	0-10V	1-100%	Yes	F-Style
57348	OTi25W/120-277/1A2/DIM-1/J	25W	150-1250mA (Programmable)	500mA	8-55V	0-10V	1-100%	Yes	J-Style
57349	OTi25W/120-277/1A2/DIM-1 AUX	25W	150-1250mA (Programmable)	500mA	8-55V	0-10V	1-100%	Yes	F-Style
57350	OTi25W/120-277/1A2/DIM-1 J/AUX	25W	150-1250mA (Programmable)	500mA	8-55V	0-10V	1-100%	Yes	J-Style
57351	OTi40W/120-277/1A4/DIM-1	40W	400-1400mA (Programmable)	700mA	8-55V	0-10V	1-100%	Yes	F-Style
57352	OTi40W/120-277/1A4/DIM-1/J	40W	400-1400mA (Programmable)	700mA	8-55V	0-10V	1-100%	Yes	J-Style
57353	OTi40W/120-277/1A4/DIM-1 AUX	40W	400-1400mA (Programmable)	700mA	8-55V	0-10V	1-100%	Yes	F-Style
57354	OTi40W/120-277/1A4/DIM-1 J/AUX	40W	400-1400mA (Programmable)	700mA	8-55V	0-10V	1-100%	Yes	J-Style
57355	OTi55W/120-277/2A0/DIM-1	55W	700-2000 mA (Programmable)	1000mA	10-55V	0-10V	1-100%	Yes	F-Style
57356	OTi55W/120-277/2A0/DIM-1/J	55W	700-2000 mA (Programmable)	1000mA	10-55V	0-10V	1-100%	Yes	J-Style
57357	OTi55W/120-277/2A0/DIM-1 AUX	55W	700-2000 mA (Programmable)	1000mA	10-55V	0-10V	1-100%	Yes	F-Style
57358	OTi55W/120-277/2A0/DIM-1/J AUX	55W	700-2000 mA (Programmable)	1000mA	10-55V	0-10V	1-100%	Yes	J-Style
347V									
57994	OTi25W/347/1A2/DIM-1	25W	150-1250mA (Programmable)	500mA	8-55V	0-10V	1-100%	Yes	F-Style
57995	OTi25W/347/1A2/DIM-1/J	25W	150-1250mA (Programmable)	500mA	8-55V	0-10V	1-100%	Yes	J-Style
57996	OTi25W/347/1A2/DIM-1 AUX	25W	150-1250mA (Programmable)	500mA	8-55V	0-10V	1-100%	Yes	F-Style
57997	OTi25W/347/1A2/DIM-1 J/AUX	25W	150-1250mA (Programmable)	500mA	8-55V	0-10V	1-100%	Yes	J-Style
57998	OTi40W/347/1A4/DIM-1	40W	400-1400mA (Programmable)	700mA	8-55V	0-10V	1-100%	Yes	F-Style
57999	OTi40W/347/1A4/DIM-1/J	40W	400-1400mA (Programmable)	700mA	8-55V	0-10V	1-100%	Yes	J-Style
58008	OTi40W/347/1A4/DIM-1 AUX	40W	400-1400mA (Programmable)	700mA	8-55V	0-10V	1-100%	Yes	F-Style
58009	OTi40W/347/1A4/DIM-1 J/AUX	40W	400-1400mA (Programmable)	700mA	8-55V	0-10V	1-100%	Yes	J-Style

Ordering Guide

OTi	55W	/	120-277	/	2A0	/	DIM-1	/	J	/	AUX
OPTOTRONIC® intelligent	Output Wattage		Input Voltage (120-277V) (347V)		Maximum output current 2000mA		1% Dimmable		J-Style Housing		AUX

Accessories



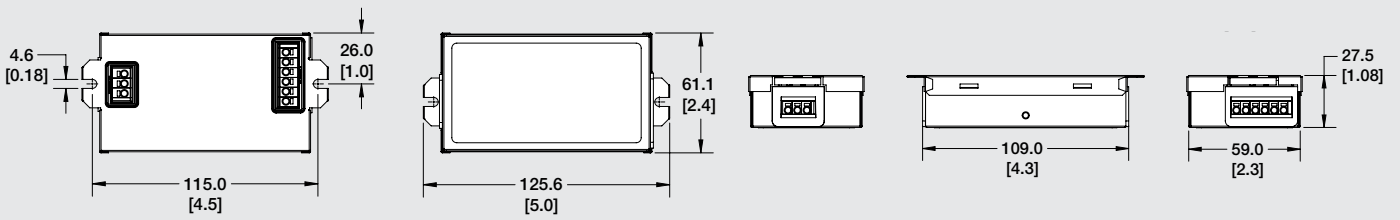
Item Number	Ordering Abbreviation	Description	Required Accessory
51645	OT Programmer	USB Programming Tool	Yes
51646	OT Programming nest	Programming fixture	Optional

Minimum and Maximum Ratings

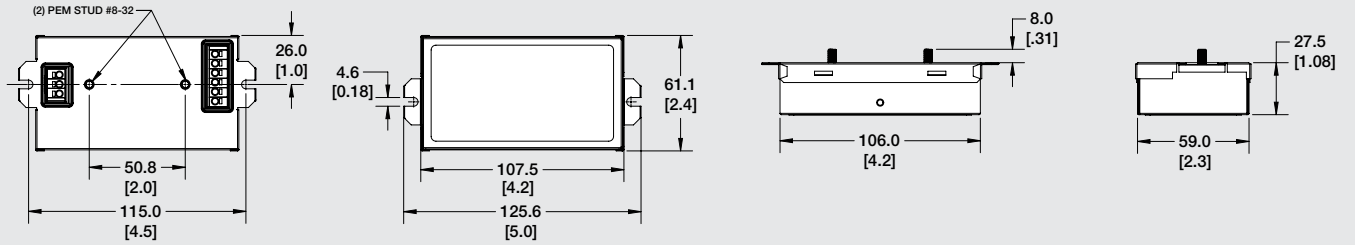
Parameter	Values
Input Voltage Range	108-305V _{AC}
Maximum Case Temperature (T _c point)	90°C (185°F)
Maximum Case Temperature for 5-Year Life and Warranty	80°C (176°F) for 25W/40W models; 75°C (167°F) for 55W
Ambient Operating Temperature (reference)	OTi25W: -30°C to 50°C (-22°F to 122°F) OTi40W: -35°C to 50°C (-22°F to 122°F) OTi55W: -35°C to 45°C (-31°F to 113°F) OTi25W, 40W: (347V): -40°C to 50°C (-40°F to 122°F)
Storage Temperature	-35°C to 75°C (-31°F to 167°F)
Maximum Relative Humidity	85% (Non-condensing)

Assembly Diagram

F-Style



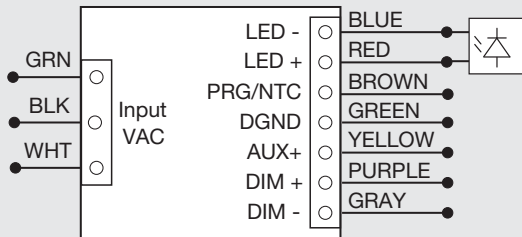
J-Style



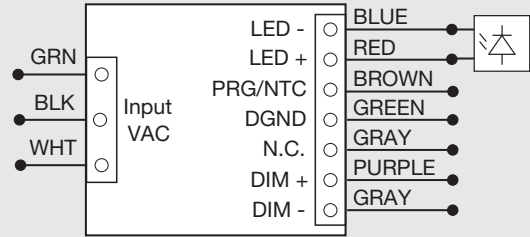
Dimensions: in [mm]

Wiring Diagram

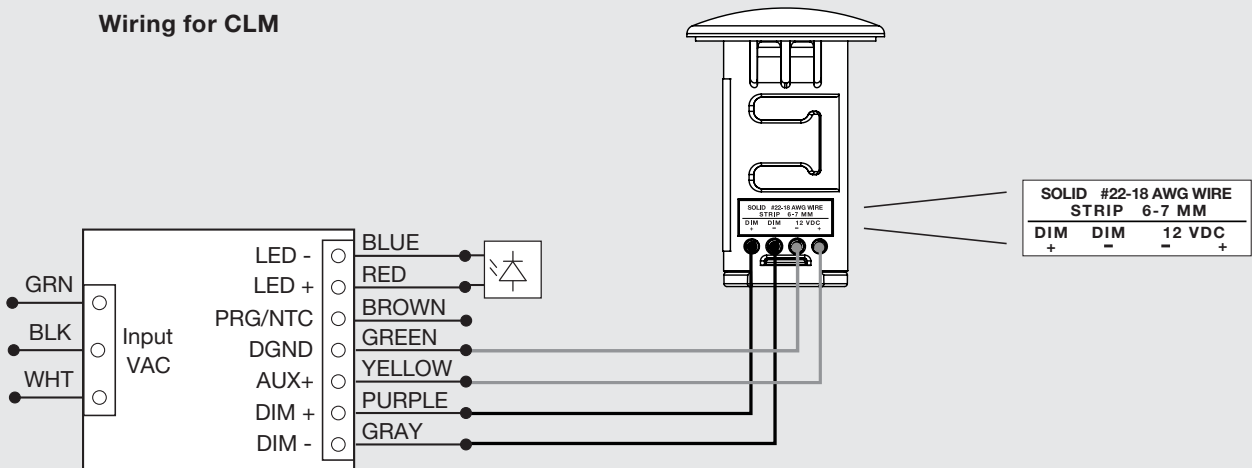
Wiring diagram for AUX output models



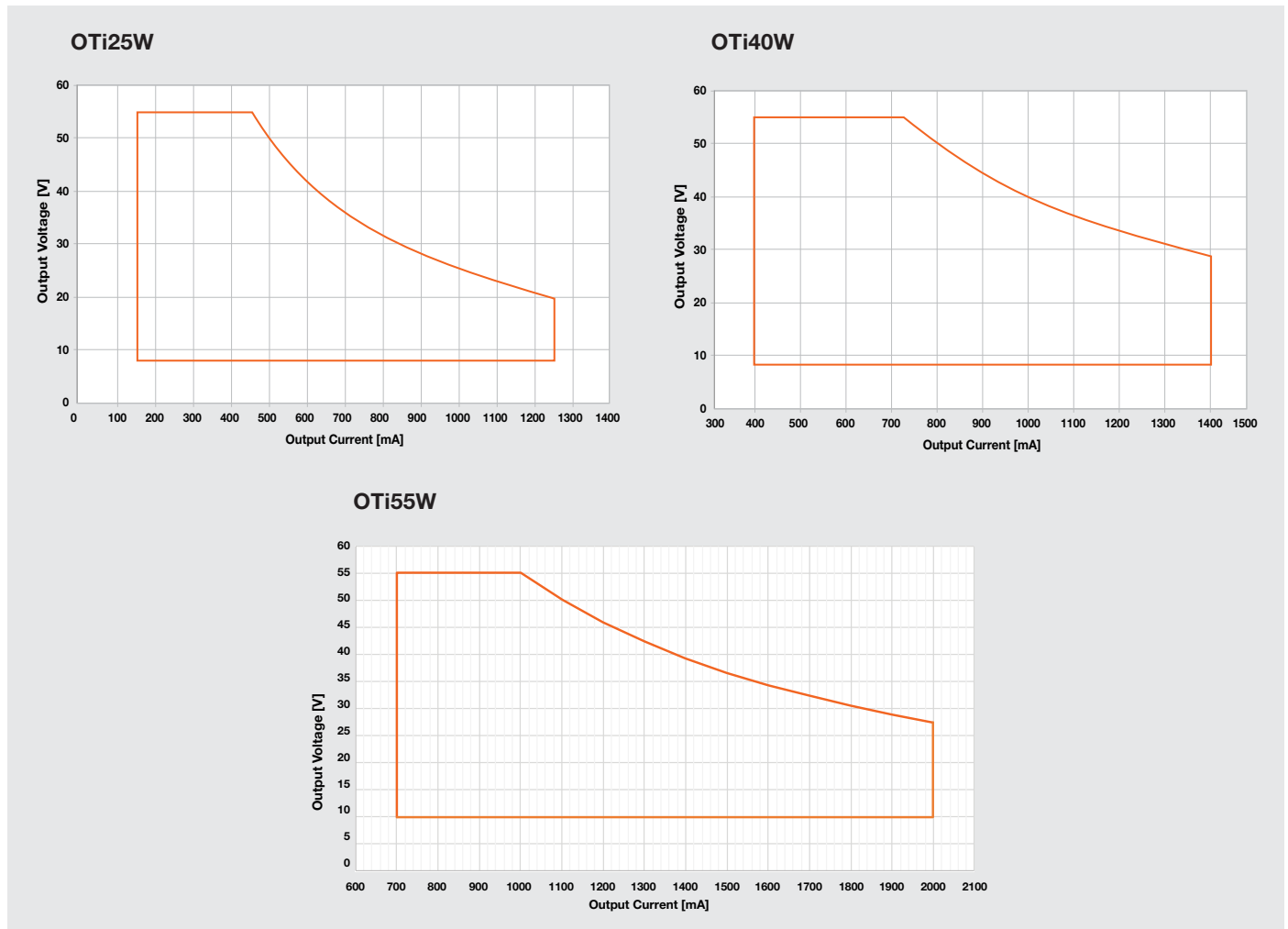
Wiring diagram for non-AUX output models



Wiring for CLM



Operating Range



Packaging

Quantity: 20 pieces per case

Weight: 0.5 lbs ea./10 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.us.

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