

OPTOTRONIC® Driver with DEXAL™ Technology



An intra-luminaire, bi-directional digital communications interface



The OSRAM OPTOTRONIC LED Programmable Driver with DEXAL Technology, is a non-proprietary, intra-luminaire interface that enables bi-directional communications between the driver and the fixture-integrated component. It provides exact luminaire-specific data, including diagnostics, to light management systems. Fixture manufacturers can design smart fixtures and streamline the configuration process by leveraging DEXAL as a standard bi-directional communications interface.

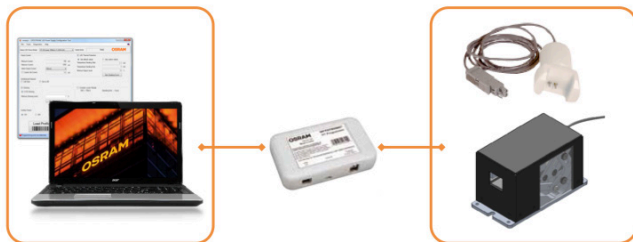
DEXAL is compatible with a growing list of industry leading light management systems:



Key Features & Benefits

- Two-way communication and power between driver and fixture-integrated components
- Helps streamline luminaire configuration and manufacturing process (one driver can support multiple LMS)
- Enables exact luminaire-specific data including:
 - Power consumption
 - Temperature profile
 - Operating hours
 - Diagnostics
- 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
 - Dim-to-off
 - Soft start
- Programming doesn't require powering up or connecting the power supply to AC line voltage
- Specification grade dimming down to 1%
- Slim form factors
- Input voltage:
 - Universal 120-277VAc 50/60Hz
- UL Class 2 output for safe operation

Configuration Overview



Application Information

- Indirect/direct
- Linear
- Recessed troffer

Product Offering

Maximum Power	Minimum Dimming	Output Current Range
50W	1%	600 - 1400mA
30W	1%	150 - 1050mA

Specifications and Certifications



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 #
30W	120-277V _{ac} 50/60 Hz	0.31 @ 120V 0.14 @ 277V	>0.9	<20%	ANSI C62.41 Cat.A 2.5kV	>85%	Dry & Damp	E320395
50W	120-277V _{ac} 50/60 Hz	0.52 @ 120V 0.22 @ 277V	>0.9	<20%	ANSI C62.41 Cat.A 2.5kV	>85%	Dry & Damp	E320395

Ordering Information

Item Number	Ordering Abbreviation	Total Output Power	Output Current Range ¹	Default Current	Output Voltage Range (V _{DC})	Dimming Control	Dimming Range	LED Thermal Protection
OTi50								
78034	OTi50/120-277/1A4 DX L	50W	600-1400mA (programmable)	1050mA	10-56V	DEXAL	1-100%	Yes
OTi30								
78033	OTi30/120-277/1A0 DX L	30W	150-1050mA ² (programmable)	700mA	10-56V	DEXAL	1-100%	Yes

1. Default output current : 50W- 1050mA and 30W- 700mA
2. Output current below 350mA is in PWM mode

Ordering Guide

OTi	50	/	120-277	/	1A0	DX	L
OPTOTRONIC® Intelligent	Output Wattage 50 = 50W 30 = 30W		Input Voltage		Output Current (Max) 1A4 - 1400mA 1A0 - 1050mA	DEXAL™	L = Linear

Accessories

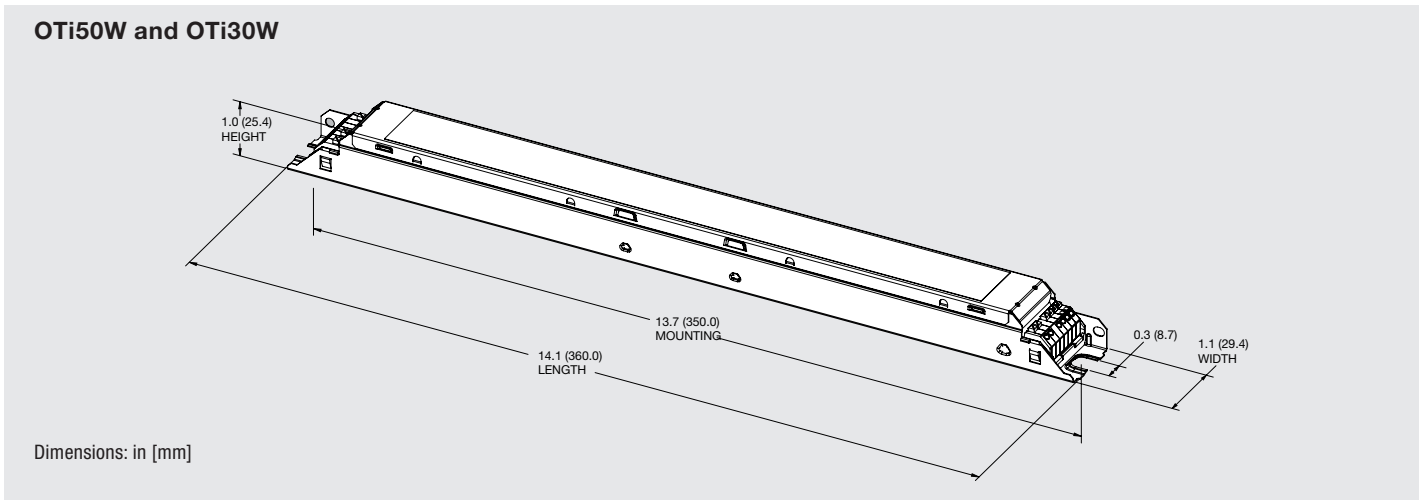


Item Number	Ordering Abbreviation	Description	Required Accessory
51645	OT Programmer	USB Programming Tool	Yes
51647	OTLinearHandheldPRGtool	Programming Tool	No
51648	OTLinearAutoPRGTool	Programming Tool	No

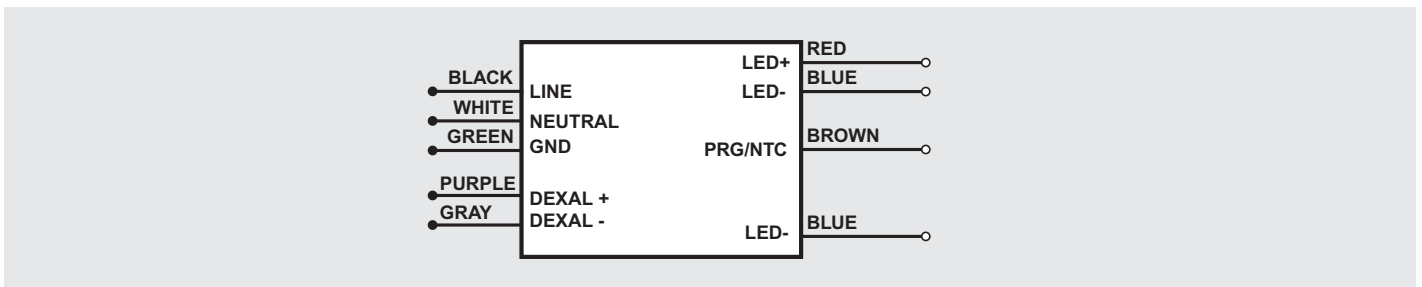
Minimum and Maximum Ratings

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) for 30/48/50W, 80°C (176°F) for 85W
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)

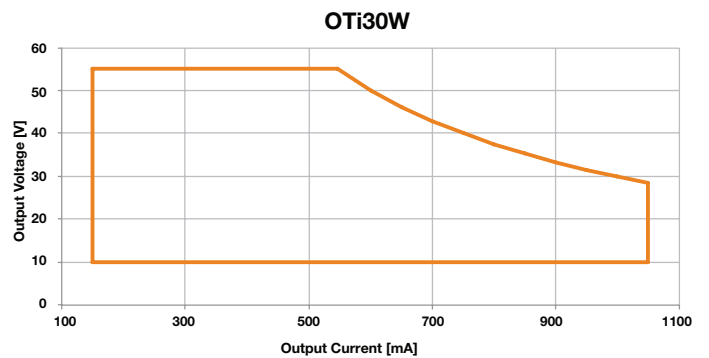
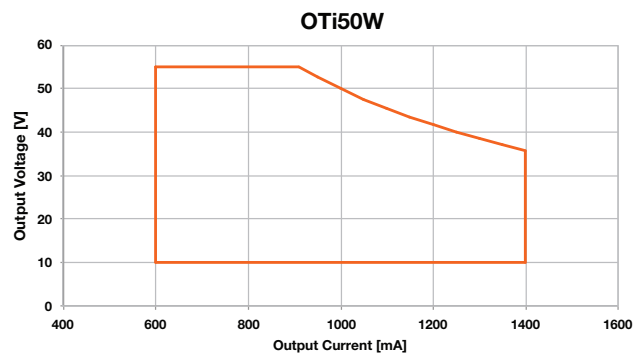
Assembly Diagram



Wiring Diagram



Operating Range



Packaging

OTi50W and OTi30W

Quantity: 20 pieces per case

Weight: 0.7 lbs ea./13.85 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.

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