

OPTOTRONIC® Horticulture P7 Series

Programmable Constant Current Outdoor Dimmable LED Drivers



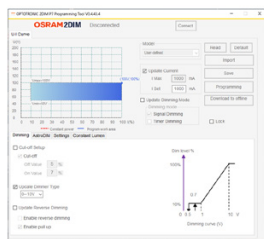
The OPTOTRONIC Horticulture P7 Series programmable dimmable family consists of highly efficient, constant current LED drivers for outdoor and horticultural applications. One click programming through the OPTOTRONIC Programmer allows OEMs to configure the output current with 1mA resolution. Auxiliary models are available with up to 3.6W capability at 12V.

These drivers are available in dimming to 10% with built-in 0-10V dimming and dim-to-off capability, enables direct integration and operation with standard dimmers and sensors, as well as energy and light management systems.

The compact metal case and high efficiency enable the driver to operate with high reliability and to extend product lifetime. Overall protection is provided against lightning surge, output over-voltage, short circuit, and over-temperature, ensuring low failure rate.

Configuration Overview

1. Program Units



Light is OSRAM

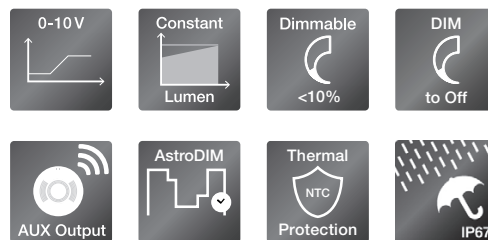
Key Features & Benefits

- OEM programmable with 1mA resolution to perfectly match LED load and maximize performance
- Dimming down to 10% on 0-10V dimmers
- Auxiliary output on select models: 12V, 300mA (320W and 600W only)
- Integrated OEM programmable features include
 - 3-in-1 dimmable: 0-10V_{DC}, PWM, AstroDIM
 - Dim-to-Off
 - Constant lumen maintenance
- Programming doesn't require powering up or connecting the power supply to AC line voltage
- Surge protection: 5KV line-line, 10KV line-earth
- Protections: SCP, OVP, OTP
- Universal Input Voltage 120-277V_{AC} 50/60Hz
- UL Dry, Damp and Wet Rated
- IP67 Rated
- UL recognized

Product Offering

Maximum Power	Input Voltage	Minimum Dimming	Output Current Range (mA)
240W	120-277V	10%	3750-7500
240W	120-277V	10%	2850-5710
240W	120-277V	10%	1050-2100
240W	120-277V	10%	750-1500
240W	120-277V	10%	530-1050
320W	120-277V	10%	5000-10,000
320W	120-277V	10%	3750-7500
320W	120-277V	10%	750-3200
320W	120-277V	10%	1050-2100
320W	120-277V	10%	550-1100
600W	120-277V	10%	7500-12,500
600W	120-277V	10%	1050-1750
600W	120-277V	10%	2800-5600
600W	120-277V	10%	1400-2800

2. Configurable Features



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Application Information

Applications

- Grow container
- Horticulture
- Industrial lighting
- Landscape lighting
- Living walls
- Roadway lighting
- Vertical farming

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	Dimensions (in) (LxWxH)
240W	120-277V, 50/60Hz	3.3	0.97	<15%	5KV line-line, 10KV line-earth	92%	Dry, Damp, Wet	8.23 x 2.68 x 1.54
320W	120-277V, 50/60Hz	4.2	0.97	<15%	5KV line-line, 10KV line-earth	92%	Dry, Damp, Wet	9.10 x 3.87 x 1.65
600W	120-277V, 50/60Hz	4.5	0.96	<15%	5KV line-line, 10KV line-earth	94%	Dry, Damp, Wet	10.91 x 4.92 x 1.54

Ordering Information

Item Number	Ordering Abbreviation	Total Output Power (W)	Output Current Range (mA)	Default Current Setting (A)	Output Voltage Range (V _{oc})	Dimming Control	Dimming Range	Dim-to-Off
Non AUX								
57580	OT240/UNV/7A5/2DIM/P7	240	3750-7500	6.7	20-41	0-10V	10-100%	Yes
57581	OT240/UNV/5A7/2DIM/P7	240	2850-5710	5	38-62	0-10V	10-100%	Yes
57582	OT240/UNV/2A1/2DIM/P7	240	1050-2100	1.4	85-171	0-10V	10-100%	Yes
57583	OT240/UNV/1A5/2DIM/P7	240	750-1500	1.05	114-229	0-10V	10-100%	Yes
57588	OT240/UNV/1A0/2DIM/P7	240	530-1050	0.7	171-343	0-10V	10-100%	Yes
57592	OT320/UNV/10A0/2DIM/P7	320	5000-10,000	8.9	20-41	0-10V	10-100%	Yes
57593	OT320/UNV/7A5/2DIM/P7	320	3750-7500	6.7	38-62	0-10V	10-100%	Yes
57594	OT320/UNV/3A2/2DIM/P7	320	750-3200	3.2	72-143	0-10V	10-100%	Yes
57595	OT320/UNV/2A1/2DIM/P7	320	1050-2100	2.1	115-230	0-10V	10-100%	Yes
57596	OT320/UNV/1A1/2DIM/P7	320	1550-1100	1.05	235-457	0-10V	10-100%	Yes
AUX								
57334	OT320/UNV/10A0/2DIM/A/P7	320	5000-10,000	8.9	20-41	0-10V	10-100%	Yes
57335	OT320/UNV/7A5/2DIM/A/P7	320	3750-7500	6.7	38-62	0-10V	10-100%	Yes
57336	OT320/UNV/3A2/2DIM/A/P7	320	750-3200	3.2	72-143	0-10V	10-100%	Yes
57337	OT320/UNV/2A1/2DIM/A/P7	320	1050-2100	2.1	115-230	0-10V	10-100%	Yes
57338	OT320/UNV/1A1/2DIM/A/P7	320	550-1100	1.05	235-457	0-10V	10-100%	Yes
57339	OT600/UNV/12A5/2DIM/A/P7	600	7500-12,500	11.2	20-54	0-10V	10-100%	Yes
57340	OT600/UNV/1A7/2DIM/A/P7	600	1050-1750	1.4	240-428	0-10V	10-100%	Yes
57341	OT600/UNV/5A6/2DIM/A/P7	600	2800-5600	5.6	54-134	0-10V	10-100%	Yes
57342	OT600/UNV/2A8/2DIM/A/P7	600	1400-2800	2.8	106-268	0-10V	10-100%	Yes

Ordering Guide

OT	240	/	UNV	/	XAX	/	2DIM	/	A	/	P7
OPTOTRONIC	Output Wattage		Input Voltage		Max Output Current		0-10V Dimming		Auxilliary Output		IP67
	240W		UNV = 120-277V		7A5 = 7.5A						
	320W				5A7 = 5.71A						
	600W				2A1 = 2.1A						
					1A5 = 1.5A						
					1A0 = 1.05A						
					3A2 = 3.2A						
					1A1 = 1.1A						
					12A5 = 12.5A						
					1A7 = 1.75A						

Accessories



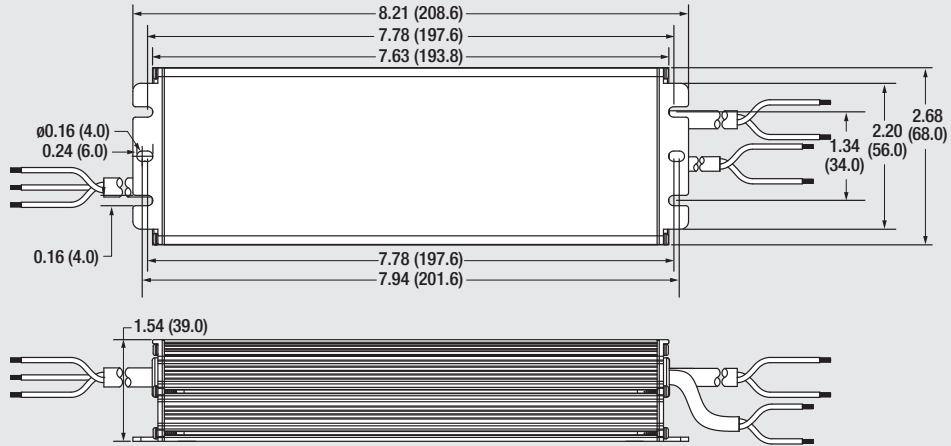
Item Number	Ordering Abbreviation	Description	Required Accessory
57568	OT P7 Programmer	USB Programming Tool	Yes

Minimum and Maximum Ratings

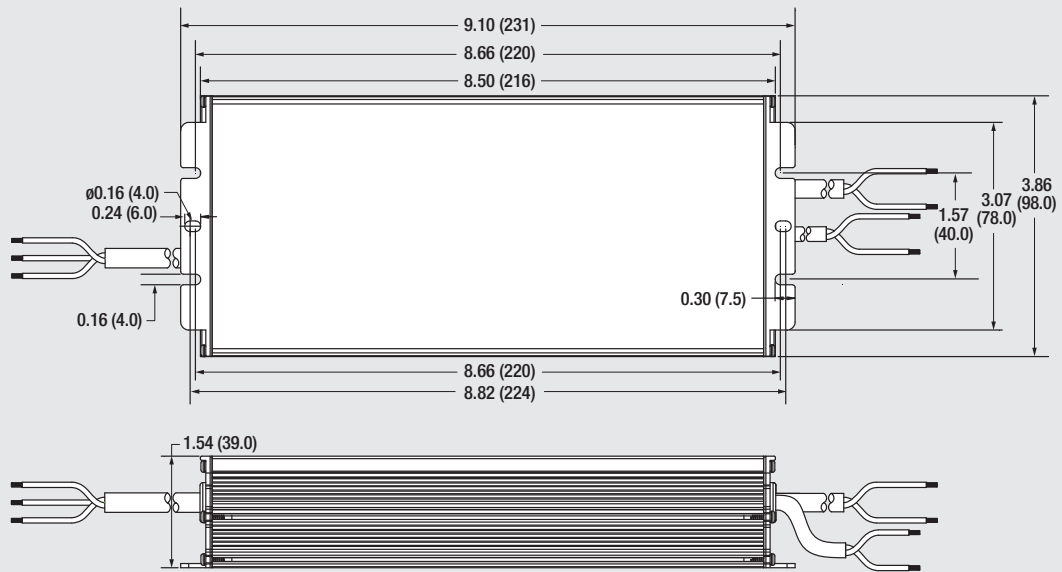
Parameter	Values
Input Voltage Range	108 to 305V _{ac}
Maximum Case Temperature (T _c point)	90°C (194°F)
Maximum Case Temperature for 5 year life and warranty	75°C (167°F)
Ambient Operating Temperature (reference)	240/320W: -40°C to 60°C (-40°F to 140°F) 600W: -40°C to 55°C (-40°F to 131°F)
Storage Temperature	85°C Max (185°F)
Maximum Relative Humidity	95% (Non-condensing)

Assembly Diagrams

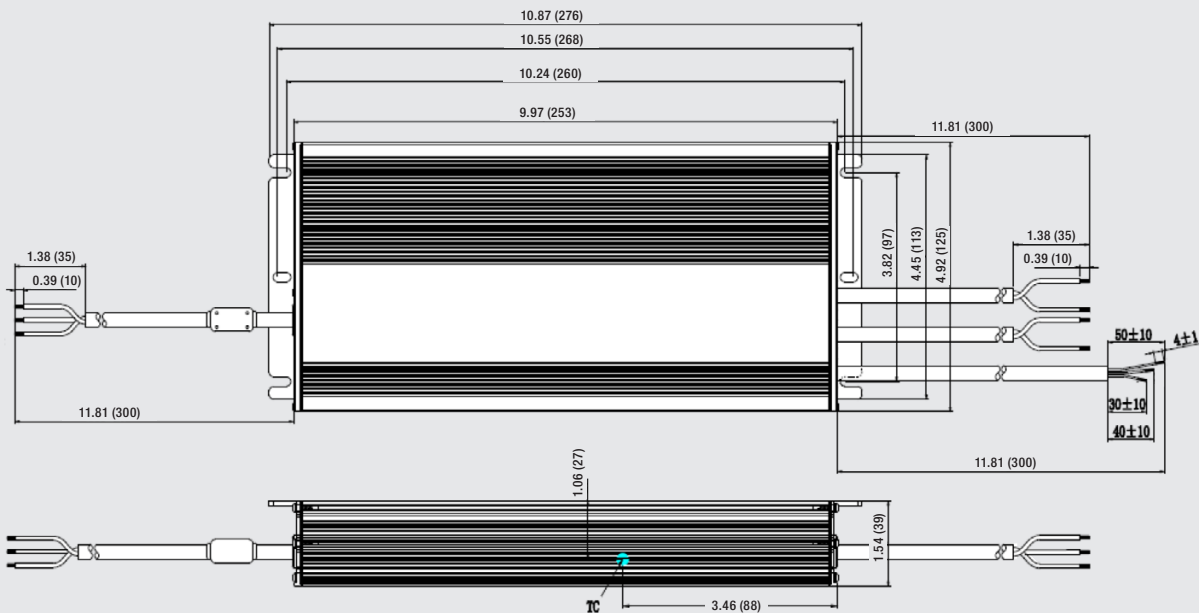
OT240W



OT320W



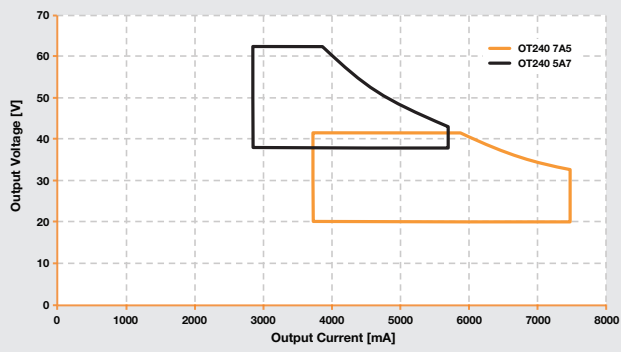
OT600W



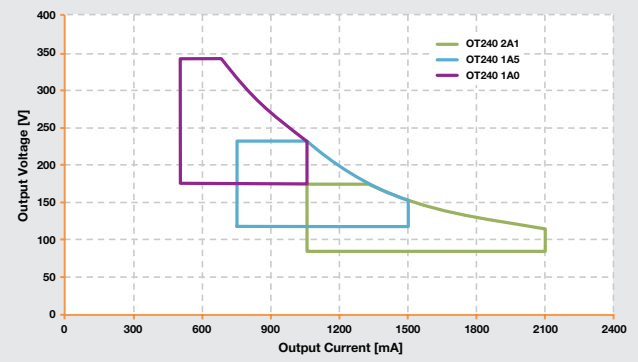
Dimensions in inches (mm)

Operating Range

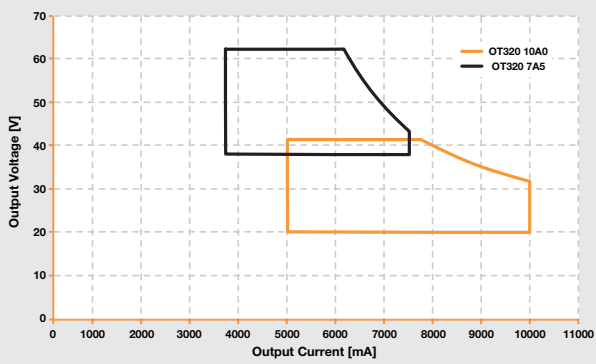
OT240W Class 2



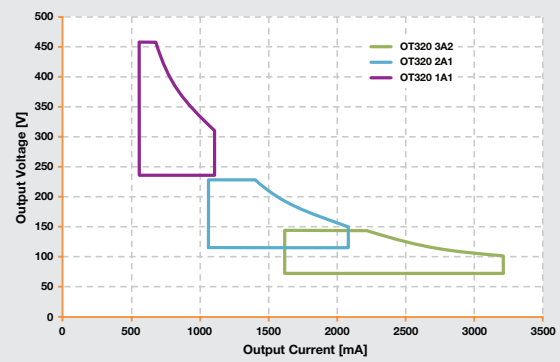
OT240W Class 1



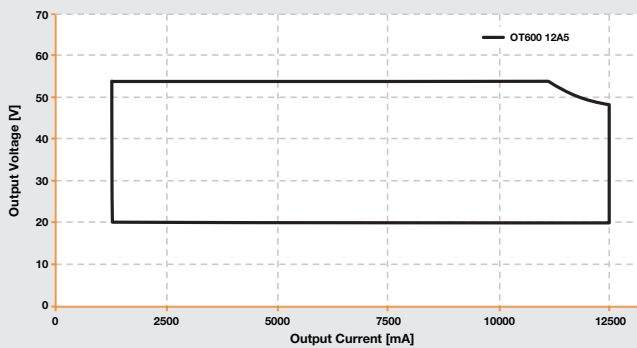
OT320W Class 2



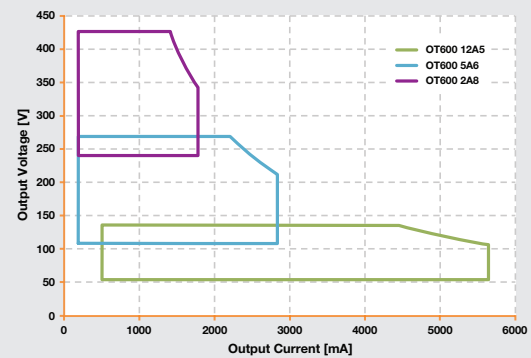
OT320W Class 1



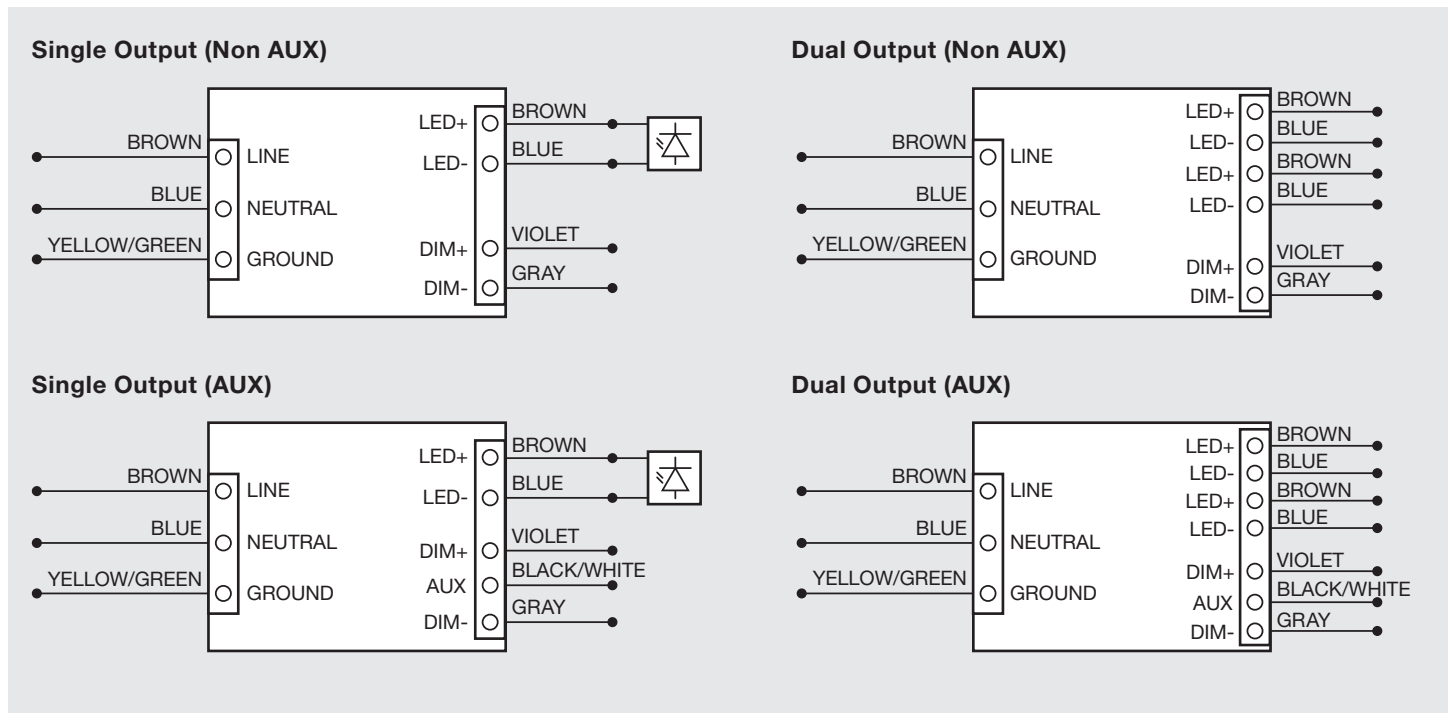
OT600W Class 2



OT600W Class 1



Wiring Diagrams



Packaging

OT240W
Quantity: 360 pieces per pallet

OT320W
Quantity: 360 pieces per pallet

OT600W
Quantity: 216 pieces per pallet

Warranty

The OPTOTRONIC® Hoticulture P7 Series is covered under the standard 5-year OSRAM warranty at Tc 75°C.

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ECS392 5-21

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