

OPTOTRONIC®

Electronic 24V DC LED Power Supplies



OPTOTRONIC power supplies are compact and electronically stabilized. The wide range of input voltage, on select models, from 100 to 277 VAC enables worldwide use on single-phase AC power lines. These supplies are available with 24VDC outputs. OPTOTRONIC power supplies are protected against open circuit, short circuit, overload and overheating conditions. They meet the highest industry standards.

Key Features & Benefits

- Damp and wet rated designs available for use in outdoor applications
- Wide Input voltage range: 100-277V AC (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
- Compact enclosures for variety of applications and fixture designs
- UL Class 2 output for safe operation
- Exceptional line and load regulation

Product Offering

Ordering Abbreviation	Output Wattage	Output Voltage
OT17W/24V/UNV	17	24
OT20W/24V/120-240V/SQ	20	24
OT30/120/24CORD	30	24
OT50W/24V/120V/LP	50	24
OT75W/24V/UNV	75	24
OT96W/24V/UNV	96	24
OT96W/24V/UNV/DIM*	96	24
OT96W/24V/UNV/JBX	96	24
OT240W/3X24V/120-240V/JBX	240	24

LED power supplies compatible with: 24V LED Modules
*Dimmable

Application Information

Applications

- Ambience lighting inside furniture
- Backlighting
- Compact installations
- Effect lighting
- General lighting
- Low & medium power applications
- Panel lighting
- Path and roadway marking
- Signs
- Step and seat marking
- Wall washing

Specifications and Certifications



OT17, OT20, OT75, OT96, OT96DIM: UL 1310, UL48 Recognized for US & Canada Class 2 Unit
OT50: UL1310 Recognized for US & Canada Class 2 Unit



OT96 (NAED 51626) & OT240 (NAED 51627): UL48 Listed for US & Canada Class 2 Unit



OT30: ETL listed and conforms to UL1310



OT75 is CSA approved



FCC 47CFR Part 15 compliant



Specification Data

Fixture Description:	Type
Project/Job:	
SYLVANIA lamp:	
SYLVANIA ballast:	
Notes:	

Ordering Information

Item Number	Ordering Abbreviation	Nominal Input Voltage (V)	Nominal Input Current (A)	Power Factor	Nominal Input Power (W)	Output Voltage (VDC)*	Output Power Range (W)	Max. Line Ripple (V)	UL/ETL File #	Location Rating
51622	OT17W/24V/UNV*	120 277	0.19 0.10	0.92	21	24.0	0.8-17	±1.0V	E220096	Damp
51512	OT20W/24V/120-240V/SQ	120 240	0.38 0.19	0.5	23	24.0	0.9-20	±0.2V	E258264	Dry
51521	OT30/120/24CORD	120	0.63	0.5	38	24.0	1-30	±1.5V	3137489	Dry
51598	OT50W/24V/120V/LP	120	0.47	0.99	56	24.0	0.9-50	±0.2V	E248522	Dry
51514 ³	OT75W/24V/UNV	120 277	0.76 0.33	0.99	90	24.0	0.9-75	±0.2V	E258264	Damp
51522 ⁴	OT96W/24V/UNV	120 277	0.97 0.39	0.9	107	24.0	1-96	±1.0V	E320395	Damp
51626	OT96W/24V/UNV/JBX	120 277	0.91 0.39	0.99	108	24.0	0.8-96	±1.0V	E320395 UL Listed	Wet ²
51627	OT240W/3X24V/120-240V/JBX	120 240	2.39 1.19	0.99	285	24.0	0.8-240	±1.0V	E320395 UL Listed	Wet ²

*7W is the minimum output power required when operating at the 277V input voltage.

Dimmable Power Supply

Item Number	Ordering Abbreviation	Nominal Input Voltage (V)	Nominal Input Current (A)	Power Factor	Nominal Input Power (W)	Output Voltage Range (VDC)*	Output Power Range (W)	Max. Line Ripple (V)	Dimming Mode	Dimming Control	Dimming Range	UL File #	Location Rating
51520	OT96W/24V/UNV/DIM	120 277	0.97 0.39	0.9	107	24.0	1-96	±1.0V	PWM	0-10V DC	10 –100%	E320395	Damp

*Output Voltage tolerance ±5%

Notes:

1. All power supplies can be remote 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).
2. Use wiring rated and marked PLTC, CL3R, and “sun resistant”
3. 51514 replaces 51513 (OT75/120/24), which is discontinued
4. 51522 replaces 51510, which is discontinued

Ordering Guide

OT	240W	/	3x24V	/	120-240	/	JBX
OPTOTRONIC®	Output Wattage		Output Voltage		Input Voltage		Junction Box

Minimum and Maximum Ratings

Parameter	Power Supply	Values
Input Voltage Range (Min/Max)	OT20 and OT240 OT30 and OT50 OT17, OT75 and OT96	108-254 VAC 108-132 VAC 108-305 VAC
Input Frequency		50/60Hz
Ambient Temperature Range	OT20 and OT50 OT30, OT96 OT75 OT17, OT96JBX and OT240	-20°C through +50°C -20°C through +40°C -25°C through +60°C -30°C through +70°C (2% de-rating per °C from 50°C)
Max. Case Temperature	OT30 OT50 OT20, OT96 OT17, OT75, OT96JBX and OT240	45°C 70°C 75°C 90°C

Assembly and Wiring Diagrams

OT17 Case:

Packaging:

Quantity: 50 pieces/carton

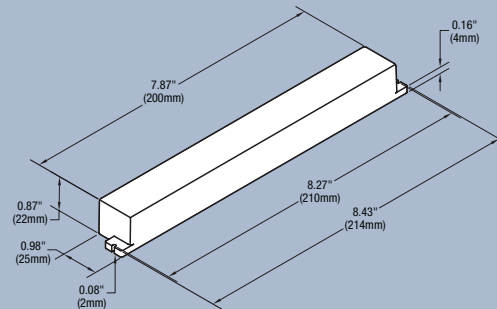
Weight: 0.36 lbs each (approx.)

18.3 lbs/carton

Wiring: Leads only (no connectors)

Input: 6" (18AWG wire) black & white wires

Output: 6" (18AWG wire) gray+ and black- wires



OT20 Case:

Packaging:

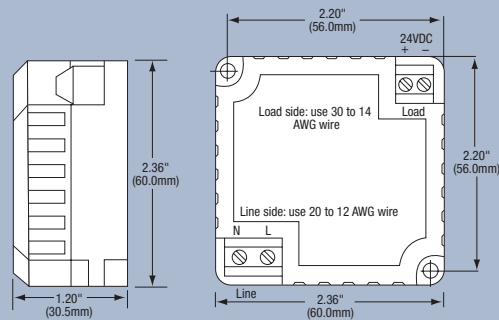
Quantity: 30 pieces/carton

Weight: 0.21 lbs each (approx.)

6.30 lbs/carton

Wiring: Connectors only (No leads provided)

Use solid or stranded copper wire only



OT50 Case:

Packaging:

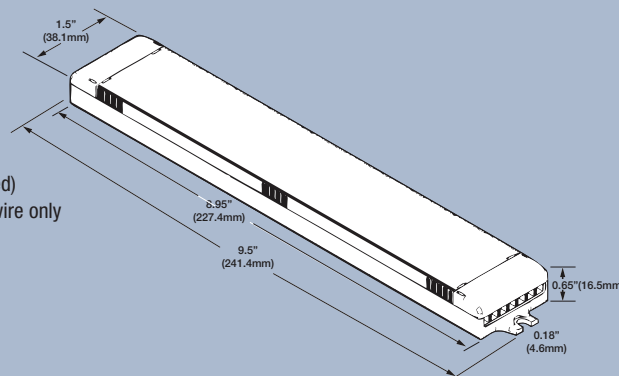
Quantity: 20 pieces/carton

Weight: 0.4 lbs each (approx.)

8.5 lbs/carton

Wiring: Connectors only (No leads provided)

Use 14-22AWG solid or stranded copper wire only



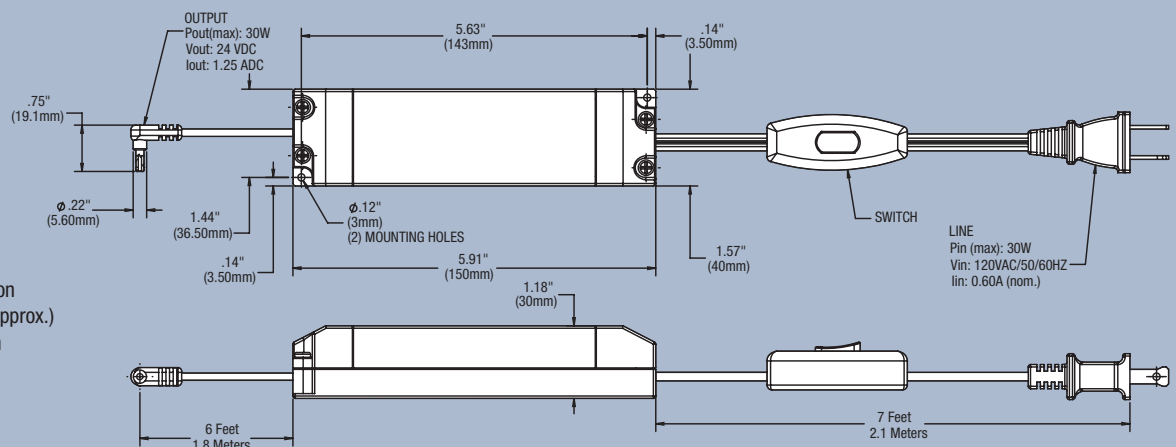
OT30 Case:

Packaging:

Quantity: 50 pieces/carton

Weight: 0.63 lbs each (approx.)

31.77 lbs/carton



Assembly and Wiring Diagrams (continued)

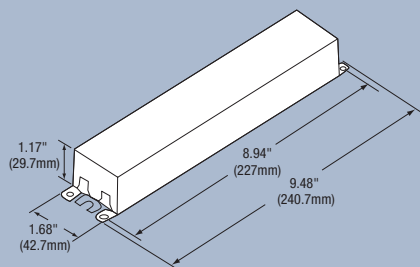
OT75 & OT96 Case:

Packaging:

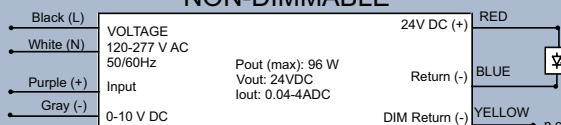
Quantity: 10 pieces/carton
Weight: 1.35 lbs each (approx.)
14 lbs/carton

Wiring: Leads only (no connectors)

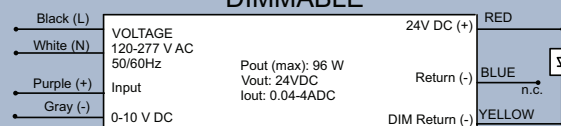
AC Input: 9" (18AWG wire) black & white wires
Output: 9" (18AWG wire) red+ & blue- wires



NON-DIMMABLE



DIMMABLE



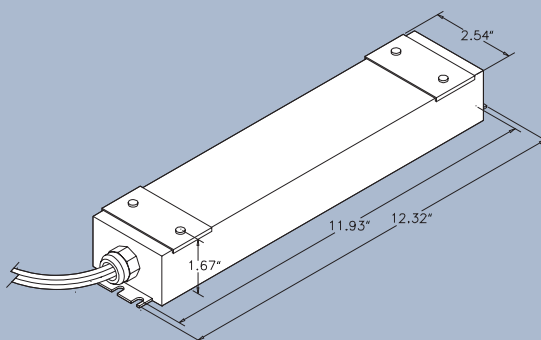
OT96JBX Case (Wet Rated):

Packaging:

Quantity: 16 pieces/carton
Weight: 2 lbs each (approx.)
33 lbs/carton

Wiring: Leads only (2.76" 18AWG wire)

Input: black (L), white (N), & green/yellow (GRD) wires with a UL Listed, 1/2" metallic fitting
Output: gray (+) & black (-) with a UL Listed, 1/2" plastic fitting

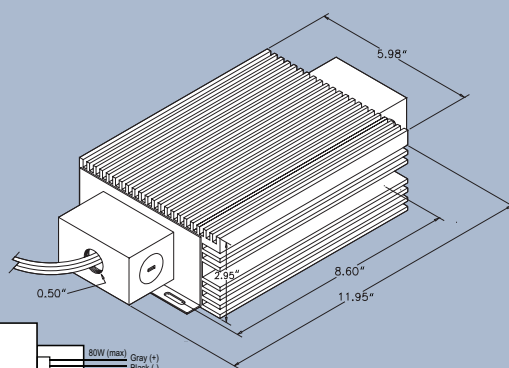
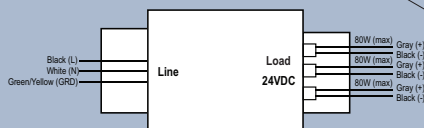


OT240 Case:

Packaging:

Quantity: 5 pieces/carton
Weight: 11 lbs each (approx.)
53 lbs/carton

Wiring: Leads only (6.9" 18AWG wire)



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 available at www.sylvania.com/LED.

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