

OPTOTRONIC®

Electronic 10V DC LED Power Supplies

Power Supply Guide

OT6/100-120/10CE
 OT20/120-240/10E
 OT25/120/10
 OT25/120/10CORD
 OT50/120/10
 OT50/120-277/10E
 LED power supplies compatible with:
 10.5V LED Modules

OSRAM 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 in 10Vdc outputs.

OPTOTRONIC power supplies are protected against open circuit, short circuit, overload and overheating conditions. They are UL recognized and FCC compliant.



Key System Features

- Wide input voltage range
- Isolated output
- UL Class 2 output
- Long life
- Short circuit and overload protection
- Remote mounting possible
- OT6, OT20, OT25/CORD, and OT50 models rated for outdoor, damp locations

System Information

OSRAM SYLVANIA has introduced a full line of LED modules (Light Emitting Diodes) and power supply products. As a result of the steady increase in their luminous efficiency, LEDs are becoming an attractive alternative in general lighting.

LED modules can be used in a wide variety of applications due to our variable module design, module geometries, and range of available colors.



Application Information

OSRAM OPTOTRONIC

power supplies are ideally suited for:

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



The LEDs are available in many different configurations to meet the demands of these applications. For additional information about OSRAM LED systems, contact OSRAM SYLVANIA or review the following literature:

Name	Description	Literature Ordering Code
LINEARlight Rigid	10.5V LED Modules	LED001
BACKlight	10.5V LED Modules	LED005
LINEARlight FLEX SIDELED	10.5V Flexible LED Strip	LED012
BACKlight 2G	10.5V BL02 LED Modules	LED033
BACKlight 2G BL04	10.5V BL04 LED Modules	LED046

For additional LED ordering information, contact OSRAM SYLVANIA.

Electronic LED Power Supply

OPTOTRONIC® 10V DC Supplies

OT-6 Case

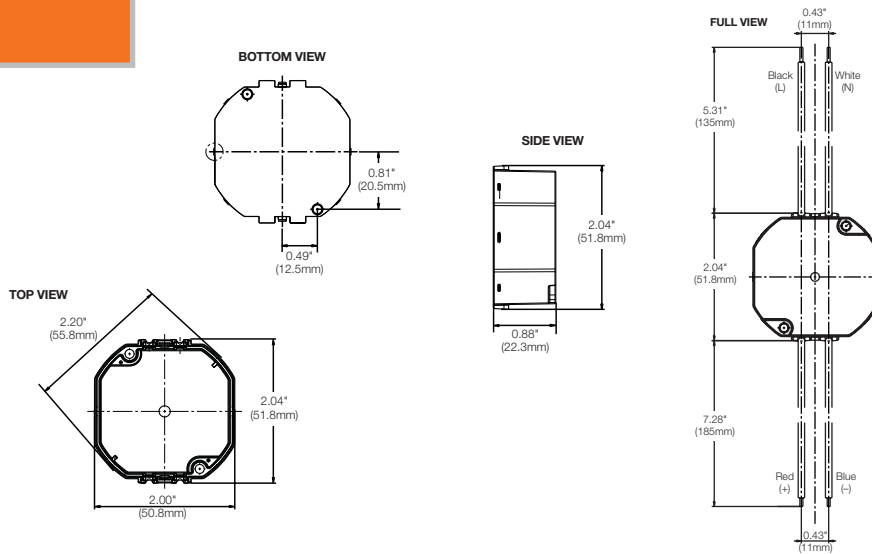
OT-6 Case:

Packaging:

Quantity: 20 pieces/carton
 Weight: 0.12 lbs each (approx.)
 3.0 lbs/carton

Wiring: Leads only

(no connectors)
 Input: (18AWG wire)
 Output: (18AWG wire)



OT-20 Case

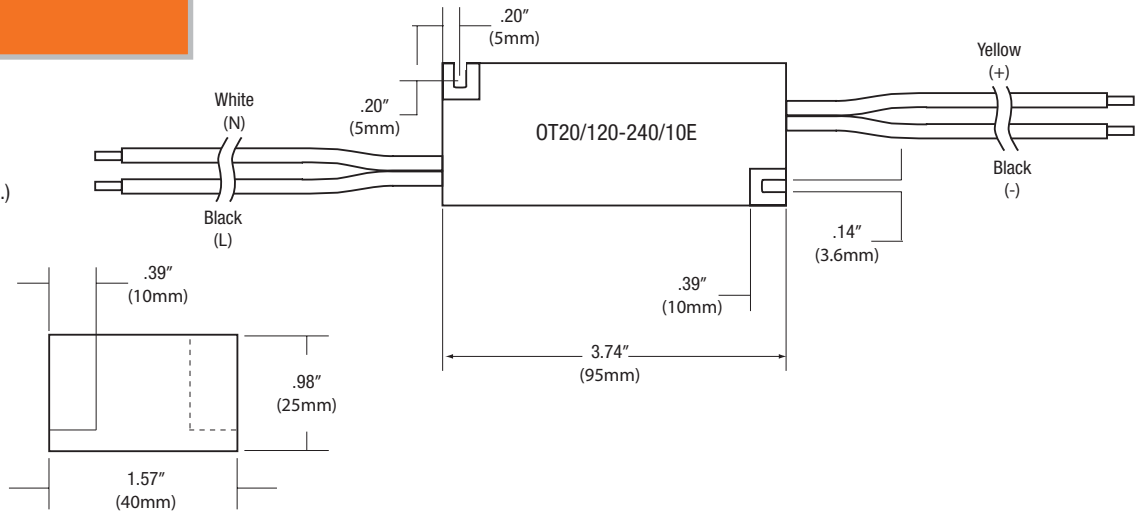
OT-20 Case:

Packaging:

Quantity: 80 pieces/carton
 Weight: 0.37 lbs each (approx.)
 30.0 lbs/carton

Wiring: Leads only

(6" 18AWG wire)



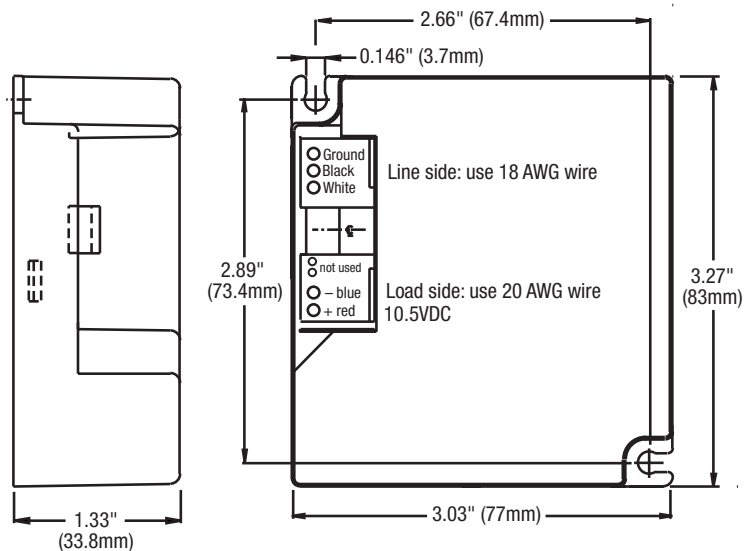
OT-25 Case

OT-25 Case:

Packaging:

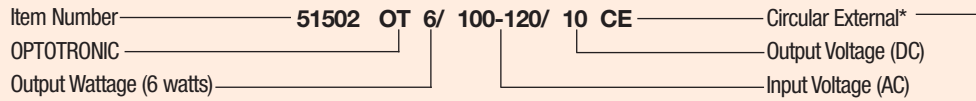
Quantity: 72 pieces/carton
 Weight: 0.385 lbs each (approx.)
 30.43 lbs/carton

Wiring: Connectors only
 (No leads provided) Use solid or tinned copper wire only



OPTOTRONIC® LED Power Supplies (DC Output)

Ordering Guide



* Additional descriptors are as follows:
CE = Circular External, E = External, CORD = Wall plug

Specifications subject to change without notice.

OT-50/120 Case

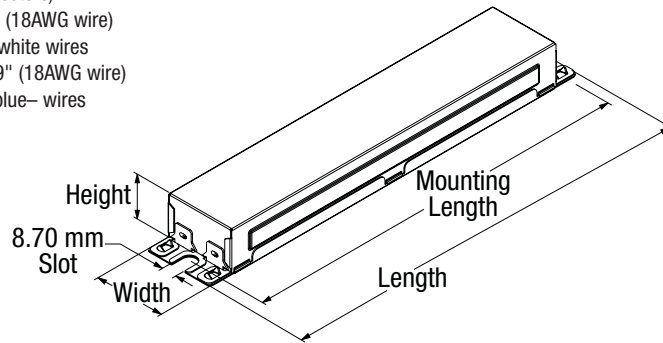
OT-50/120 Case:

Packaging:

Quantity: 20 pieces/carton
Weight: 1.22 lbs each (approx.)
24.70 lbs/carton

Wiring: Leads only

(no connectors)
Input: 9" (18AWG wire)
black & white wires
Output: 9" (18AWG wire)
red+ & blue- wires



OT-50/120-277 Case:

Packaging:

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

Dimensions:

Overall: 9.5" L x 1.7" W
x 1.18" H
Mounting: 8.90"

OT-50/120 Case

OT-25/120/10CORD Case:

Packaging:

Quantity: 12 pieces/carton
Weight: 1.18 lbs each (approx.)
14.20 lbs/carton

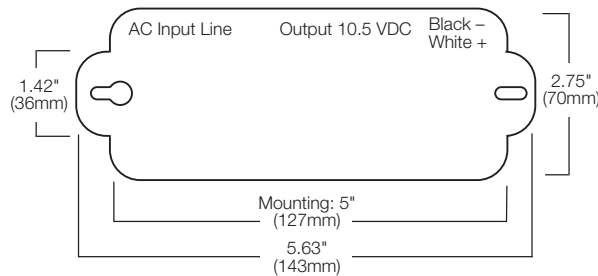
Wiring: Leads only

(no connectors)
Input: 6' (18AWG wire)
with wall plug
Output: 6' (18AWG wire)
black & white wires

SIDE VIEW



TOP VIEW



For complete power supply and LED module details, refer to the OSRAM SYLVANIA LED Systems Specification Guide or go to www.sylvania.com

OPTOTRONIC® LED Power Supplies (DC Output)

**10.5 V DC
OPTOTRONIC®
LED Power Supply**

Item Number	Description	Nominal Input Voltage (VAC)	Nominal Input Current (Amps)	Power Factor (@ 120V)	Output Voltage (VDC)	Min. Output Power (W)	Max. Output Power (W)	Max. Line Ripple (V)	Remote* Mounting (ft)	Compatible			Location Rating
										with OT9 DIM	with OT DIM	with OT RGB Controls	
51502	OT6/100-120/10CE	100-120	0.12@120V	0.55	10.5±0.5	0.4	6	±0.2V	32	YES	YES	YES	Dry+Damp
51599	OT20/120-240/10E	120-240	0.3A@120V	0.92	10.5±0.5	1	20	±1.1V	12	NO	NO	NO	Dry+Damp
51505	OT25/120/10	120	0.26@120V	0.90	10.5±1.0	3	25	±1.1V	10	NO	NO	NO	Dry
51508	OT50/120/10	120	0.52@120V	0.90	10.5±1.0	10	50	±1.1V	8	NO	NO	NO	Dry+Damp
51509	OT50/120-277/10E	120-277	0.51@120V 0.22@277V	0.99	10.5±1.0	0.4	50	±0.2V	32	YES	YES	YES	Dry+Damp
51506	OT25/120/10CORD	120	0.42@120V	0.64	10.5±0.5	0.5	25	±0.5V	58	YES	YES	YES	Dry+Damp

*Although it is possible to exceed the remote mounting distances, the installer and/or end user must take precautions to prevent and/or test the effects of EMI (electromagnetic interference).

Additional Specifications

UL Class 2 Outputs

Input Voltage Range:

OT6: 90 - 132 VAC
 OT20: 108 - 254 VAC
 OT25, OT25/CORD, OT50/120:
 108-132 VAC
 OT50/120-277: 108 - 305V

Input Frequency: 50/60Hz

Efficiency: 80% Typical

Ambient Temp. Range:

-20°C through +50°C
 OT20: -30°C through +60°C
 OT50/120-277: -25°C through +60°C

Max. Case Temp.:

OT6, OT20: 70°C
 OT25, OT25/CORD, OT50/120: 90°C
 OT50/120-277: 90°C



OT6, OT20, OT25, OT50: UL 1310, UL48
 Recognized for US & Canada
 Class 2 Unit (UL file #E248522 &
 E220096)



OT25/cord: UL1310 listed
 Class 2 unit (UL file# E245572)



OT6, OT25 & OT50 are CSA approved

FCC 47CFR Part 15 compliant

OT6, OT20: Class B (residential)

OT25, OT50: Class A (commercial non-consumer)

RoHS compliant (except for NAED 51505 & 51508)

System Life / Warranty

OPTOTRONIC LED Power Supply Products are covered by our LED system warranty, a comprehensive LED module and power supply system warranty. For additional details, refer to our latest version of the LED warranty bulletin.

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