OPTOTRONIC® Power Supply
OT96W/24V/UNV/DIM

**GENERAL INFORMATION**
- **Item Number**: 51520
- **Type**: Constant Voltage
- **Output Power**: 96W (Max.)
- **Output Voltage**: 24V DC
- **Input**: Universal (120-277V)

**ENIRONMENTAL SPECIFICATIONS**
- **Ambient Operating Temp**: -25 to 40 ºC
- **Max. Case Temp. Tc**: 75ºC
- **Storage Temp.**: -25 to 50 ºC
- **Max. Relative Humidity (%)**: 96% non-condensing
- **Surge Protection (KV)**: ANSI C62.41 Cat A (2.5KV)
- **Vibration Rating**: 3G
- **Overvoltage Protection**: Yes
- **Short Circuit Protection**: Yes
- **Over-temperature Protection**: Yes
- **UL Environmental Rating**: Damp
- **IP Rating**: IP64
- **EMI Compliance**: FCC Part 15 Class A

**ELECTRICAL SPECIFICATIONS**

**Input**
- **Input Voltage (VAC)**: 120V-277V (+/- 10%)
- **Frequency Range (Hz)**: 50 – 60 Hz (+/- 10%)
- **Input Current (A)**: 0.91 @ 120V
  - 0.39 @ 277V
- **Input Power (W)**: 111W
- **THD**: < 20%
- **Power Factor**: > 0.95
- **Inrush Current (Apeak)**: < 55A
- **Line Regulation**: < 5%
- **Stand-by Power (W)**: < 1.5W

**Output**
- **Output Voltage (VDC)**: 24V (+/- 5%)
- **Output Current (A)**: 0.1 – 4.0A
- **Output Ripple (V)**: 1V
- **Efficiency**: >85% (Typical)
- **Load Regulation**: <5%

**DIMMING**
- **Dimming Control**: 0 – 10V
- **Dimming Range**: 10 – 100%
- **Dimming Type**: PWM
- **Frequency**: 250Hz
- **Dimming Input Isolation**: 2.5KV

**WIRING DIAGRAM**

Note: Mounting distance for 18 AWG wire is 15 feet. For additional information on further distances and EMI compliance reference application note LED126.

**MECHANICAL DIAGRAM**

* When using the additional OTDIM unit, wire the 96W driver as in the NON-DIMMABLE diagram

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www.sylvania.com/OPTOTRONIC
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.

TYPICAL EFFICIENCY

TYPICAL POWER FACTOR

TYPICAL THD

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Specifications subject to change without notice
1-800-LIGHTBULB (1-800-544-4828)
## Key Features
- **UL Class 2**
- Ultra small, compact size
- Tightly regulated output: 1% line, 5% load
- Power factor: 90% min
- Total harmonic distortion: 20% max
- Current crest factor: 1.5 max

## Specifications
- **Location:** Damp IP66
- **Output Voltage:** 24v DC
- **Output Power:** 100w
- **Input Voltage:** 120 to 277 VAC
- **Ambient Temp:** -40˚C to +50˚C
- **Weight:** 1.41 lbs
- **Dimming:** Yes

### 100-Watt Driver
- **Max Run Length in Series** | **Max Run Lengths in Parallel**
- **line .75 - SO / ledge / luxrail** | 47’ (14.33m) | 87’ (26.52m)
- **line .75 - HO / ledge / luxrail** | 12’ (3.66m) | 23’ (7.018m)
- **line .75 - VHO (and color) / ledge** | 9’ (2.74m) | 17’ (5.18m)
- **line 1.5 - SO** | 30’ (3.66m) | 60’ (18.23m)
- **line 1.5 - HO** | 8’ (2.44m) | 16’ (4.88m)
- **line 1.5 - VHO (and color)** | 6’ (1.82m) | 12’ (3.66m)
- **line 2.0 - SO** | 26’ (7.92m) | 26’ (7.92m)
- **line 2.0 - HO** | 17’ (5.18m) | 17’ (5.18m)
- **line 2.0 - VHO** | 12’ (3.66m) | 12’ (3.66m)
- **line 2.0 - V2HO / B / G / A** | 8’ (2.44m) | 8’ (2.44m)
- **line 2.0 - R** | 6’ (1.82m) | 6’ (1.82m)
12x6x4 Enclosure

Enclosure Construction
Enclosure and cover are fabricated from code 16 gauge steel. Enclosure body has mounting holes on the back and are available with or without knock outs on the sides, top and bottom ends. Cover is secured to the body with plated hex head combo screws, and has keyhole slots for easy removal without removing screws.

Enclosure Industry Standards
- UL 50 Listed, Type 1
- CSA C22.2 No. 40 certified, Type 1
- Conforms to NEMA standard for Type 1
- IEC 60529, IP30

*One driver enclosure can hold one 20W or 96W driver and one dimming module.

Left End With Cover

Front View Without Cover

Conduit Sizes

Note: Dimensions are in inches. Millimeters are for reference only. Data subject to change without notice.
**Dimming Module**

**Key Features**
- Utilizes pulse width modulation (PWM), to control LED performance
- Options available for analog or DMX protocols
- Dimming range: 0-100%
- Short circuit, overload and overheating protection

**Specifications**
- Location: Dry
- Input Voltage: 24v DC
- Max Input Current: 5.3A
- Control Voltage: 0-10v DC
- Frequency: 135 HZ
- Ambient Temp: -20˚C to +50˚C
- Weight: .165 lbs
- Power Consumption: Up to 3W

**DMX Compatibility**
A DMX to 0-10V converter will typically be required to interface with DMX control systems. ETC has tested the dimming module with the Unison Series Dimming Rack. The Unison Flourescent Option Module will provide up to (24) 0-10 signals from a single unit. The dimming module has also been tested with a 0-10 converter from Northlight Systems.

**Tested by OSRAM**

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Type</th>
<th>Model</th>
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<tbody>
<tr>
<td>HUNT</td>
<td>0-10 wall mount</td>
<td>PS-010</td>
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<tr>
<td>Leviton</td>
<td>0-10 wall mount</td>
<td>IP710-DLW</td>
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<tr>
<td>Lightolie</td>
<td>0-10 wall mount</td>
<td>ZP600F-AM 120W</td>
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<tr>
<td>Lutron</td>
<td>0-10 wall mount</td>
<td>NTFTV Series</td>
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<td></td>
<td>Control Panel</td>
<td>Grafi k Eye</td>
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<td></td>
<td>Converter to 0-10v dc</td>
<td>GRX-TVI, GRX-TVM</td>
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<tr>
<td>NorthLight Systems</td>
<td>DMX to 0-10v Converter</td>
<td>8 channels + 24 channels</td>
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Source: OSRAM's "Controllers for LED Modules" PowerPoint

**Lutron Products**

<table>
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<tr>
<th>Entire Room Controls</th>
<th>0-10 V (current sink) IEC 60929</th>
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<tbody>
<tr>
<td>Radio Touch™</td>
<td>Included</td>
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<tr>
<td>microWatt™</td>
<td>Included</td>
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<tr>
<td>Grafik Eye 3000/2000</td>
<td>GRX-TVI</td>
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<tr>
<td>4000™</td>
<td>TVM Module</td>
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<td>AXI</td>
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<tr>
<td>Spacer System</td>
<td>SPSF-6A + GRX - TVI</td>
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<td>LCP128™</td>
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<tr>
<td>G5000™/6000/7000™</td>
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<th>Whole Home Controls</th>
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<tbody>
<tr>
<td>Radio RA®</td>
<td>RA-6ND + GRX-TVI</td>
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<tr>
<td>Homeworks®</td>
<td>GRX-TVI, TVM</td>
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<tr>
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<tbody>
<tr>
<td>Nova®</td>
<td>NTFTV</td>
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<tr>
<td>Nova®</td>
<td>NFTV</td>
</tr>
<tr>
<td>Vareo® 2</td>
<td>VF10 + GRX-TVI</td>
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<tr>
<td>Diva® 2</td>
<td>DVF103P + GRX-TVI</td>
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<tr>
<td>Skylark® 2</td>
<td>SF103P + GRX-TVI</td>
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Source: Lutron Application Note #138:
*Please contact specific manufacturers for details on specific dimming control