

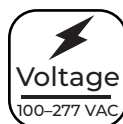


## DVP/DVPL Series

Constant Voltage Driver Specifications

Project \_\_\_\_\_

Date \_\_\_\_\_ Type \_\_\_\_\_



### Available Models<sup>1</sup>

#### Standard

##### 12 VDC

- ☐ DVP-30W-12V
- ☐ DVP-60W-12V
- ☐ DVP-96W-12V

##### 24 VDC

- ☐ DVP-30W-24V
- ☐ DVP-60W-24V
- ☐ DVP-96W-24V

#### Linear

##### 12 VDC

- ☐ DVPL-30W-12V
- ☐ DVPL-60W-12V
- ☐ DVPL-96W-12V

##### 24 VDC

- ☐ DVPL-30W-24V
- ☐ DVPL-60W-24V
- ☐ DVPL-96W-24V

### Part Number Breakdown

Example: DVPL-96W-24V

| Series                                                | Housing                 | Output Power          | Output Voltage      |
|-------------------------------------------------------|-------------------------|-----------------------|---------------------|
| <b>DVP</b><br>[DiodeDrive, Constant Voltage, Plastic] | <b>blank</b> [standard] | <b>30W</b> [30 watts] | <b>12V</b> [12 VDC] |
|                                                       |                         | <b>60W</b> [60 watts] |                     |
|                                                       | <b>L</b> [linear]       | <b>96W</b> [96 watts] | <b>24V</b> [24 VDC] |

### Overview

The DiodeDrive Constant Voltage LED Power Supply features a narrow profile, perfect for under-cabinet lighting or installation in tight spaces. Its constant DC output voltage increases the longevity of LED lighting. The design includes separate input and output compartments for concealed wiring, each with terminal block connections. The input can be hardwired or connected using the included power cord with a 1-15P plug.

### Features

- UL Class 2: 30W, 60W, 96W-24V
- UL Class P: 30W, 60W, 96W
- Standard or linear case with a thin profile for tight spaces
- Separate input/output compartments for concealed wiring
- Universal AC input, single DC output

### Product Details

- IP20, suitable for damp locations
- Surge protection: L-N: 2kV
- Universal AC input: 100-277 VAC

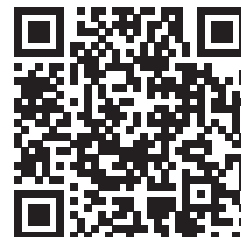
### Certifications and Compliances

- UL Listed - UL 8750 (FKSZ)
- SELV and FCC compliant



### Warranty

- 5-year warranty



T 866.201.2238  
F 314.972.6202  
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email: commercialsales@diodedrive.com

<sup>1</sup>Contact customer service if interested in other options.

Rev V2.1 Date: 03/11/2025  
Specifications are subject to change without notice.

# DVP/DVPL Series

## Constant Voltage Driver Specifications

### Specifications

| MODEL                               | DVP/DVPL- | 30W-12V                                                                  | 30W-24V | 60W-12V                  | 60W-24V | 96W-12V                  | 96W-24V |
|-------------------------------------|-----------|--------------------------------------------------------------------------|---------|--------------------------|---------|--------------------------|---------|
| OUTPUT                              |           |                                                                          |         |                          |         |                          |         |
| Output Power                        |           | 30W                                                                      |         | 60W                      |         | 96W                      |         |
| Output Voltage (±5%)                |           | 12 VDC                                                                   | 24 VDC  | 12 VDC                   | 24 VDC  | 12 VDC                   | 24 VDC  |
| Output Current                      |           | 2500mA                                                                   | 1250mA  | 5000mA                   | 2500mA  | 8000mA                   | 4000mA  |
| Output Voltage Ripple LF (Vpp)      |           | ≤200mV                                                                   |         | ≤600mV                   |         | ≤600mV                   |         |
| Output Channels                     |           | 1                                                                        |         |                          |         |                          |         |
| Line Regulation                     |           | ±3%                                                                      |         |                          |         |                          |         |
| Load Regulation                     |           | ±5%                                                                      |         |                          |         |                          |         |
| Flicker                             |           | Pst LM<1, SVM<0.4, ≤5%@≤200Hz (tested with constant voltage light strip) |         |                          |         |                          |         |
| INPUT                               |           |                                                                          |         |                          |         |                          |         |
| Input Voltage                       |           | 100-277 VAC                                                              |         |                          |         |                          |         |
| Input Frequency                     |           | 50/60Hz                                                                  |         |                          |         |                          |         |
| Power Factor                        |           | ≥0.95                                                                    |         |                          |         |                          |         |
| Input Current                       | 100 VAC   | 400mA                                                                    |         | 800mA                    |         | 1200mA                   |         |
|                                     | 230 VAC   | 180mA                                                                    |         | 300mA                    |         | 500mA                    |         |
|                                     | 277 VAC   | 140mA                                                                    |         | 250mA                    |         | 400mA                    |         |
| Inrush Current (50% Ipeak), @277VAC | DVP-      | 15A peak, 260μs duration                                                 |         | 27A peak, 1ms duration   |         | 55A peak, 1.2ms duration |         |
|                                     | DVPL-     |                                                                          |         | 28A peak, 700μs duration |         |                          |         |
| Start/Switchover/Turn Off           |           | <1.5s (100 VAC)                                                          |         |                          |         |                          |         |
| Switching Cycles                    |           | >50,000 switching cycles                                                 |         |                          |         |                          |         |
| Efficiency                          |           | (See table on following pages)                                           |         |                          |         |                          |         |
| Total Harmonic Distortion           |           | (See table on following pages)                                           |         |                          |         |                          |         |
| DIMMING                             |           |                                                                          |         |                          |         |                          |         |
| Dimming Control                     |           | None                                                                     |         |                          |         |                          |         |
| SAFETY                              |           |                                                                          |         |                          |         |                          |         |
| Withstand Voltage                   |           | I/P-O/P (LED): 3750 VAC                                                  |         |                          |         |                          |         |
| Mains Surge Capability              |           | L-N: 2kV                                                                 |         |                          |         |                          |         |





## DVP/DVPL Series

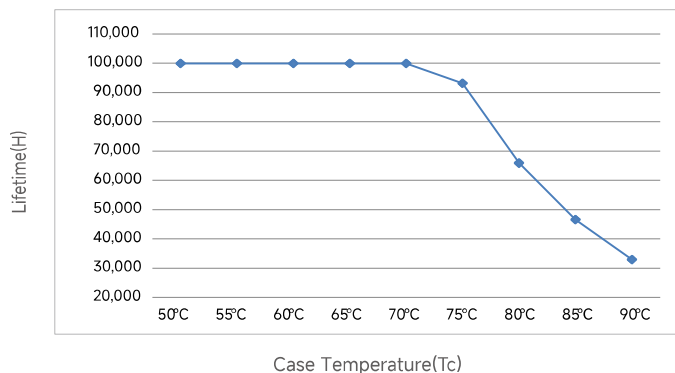
### Constant Voltage Driver Specifications

#### Specifications

| SERIES                        | DVP/DVPL-                                                              |  |
|-------------------------------|------------------------------------------------------------------------|--|
| ENVIRONMENT AND LIFETIME      |                                                                        |  |
| IP Rating                     | IP20                                                                   |  |
| Environmental Rating          | Suitable for Damp Locations, Non-Weatherproof                          |  |
| Ambient Operating Temperature | -20 to 45°C (-4 to 113°F)                                              |  |
| Maximum Tcase Temperature     | 80°C (176°F)                                                           |  |
| Storage Temp./Humidity        | -40 to 80°C (-40 to 176°F), 5-85% RH, non-condensing                   |  |
| Mean Time Between Failures    | MTBF=500,000h. (25°C) [MIL-HDBK-217F]                                  |  |
| Lifetime (NOM)                | ≤100,000h                                                              |  |
| Vibration Resistance          | 10-500Hz, 5G 12min./1 cycle, period for 72min. each along X, Y, Z axes |  |
| Acoustic Noise                | <25dB (30cm, Normal Operation)                                         |  |
| MECHANICAL HOUSING            |                                                                        |  |
| Connection Type               | Screw Terminal Block                                                   |  |
| Compatible Wire Gauge (I/O)   | 14-26AWG                                                               |  |
| Housing Color                 | Black                                                                  |  |

#### Expected Lifetime

Lifetime vs Case Temperature



- The lifetime of the LED driver is shown in the figure above (calculated based on the 90% survival rate).
- The relation between Tc and Ta temperature also depends on the luminaire design.





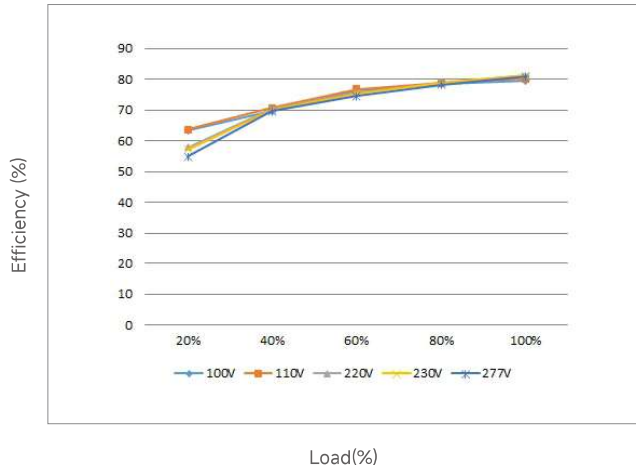
## DVP/DVPL Series

### Constant Voltage Driver Specifications

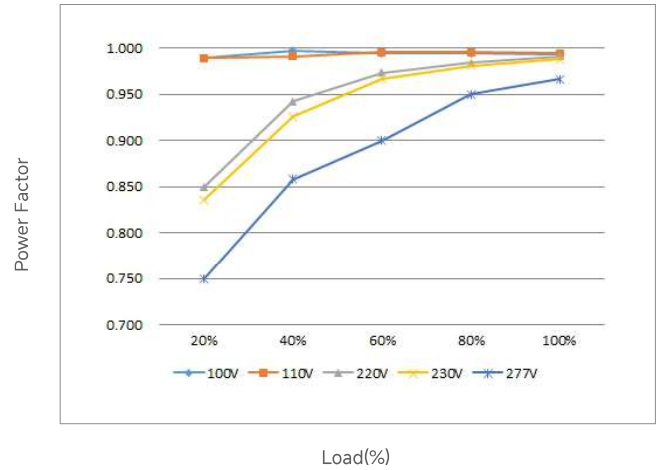
#### Performance vs Load

##### DVP/DVPL-30W-x

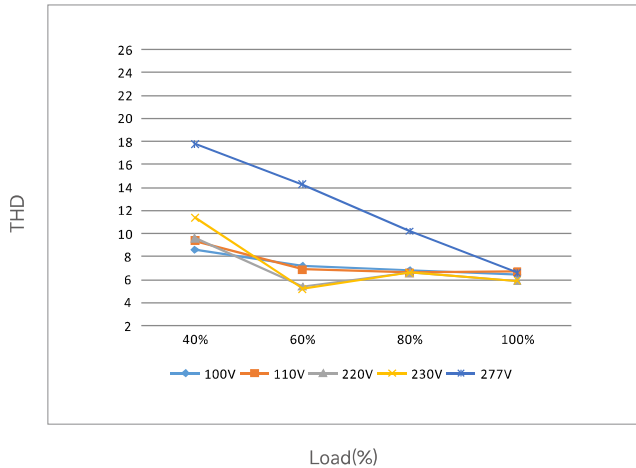
Efficiency vs Load



Power Factor vs Load



THD vs Load



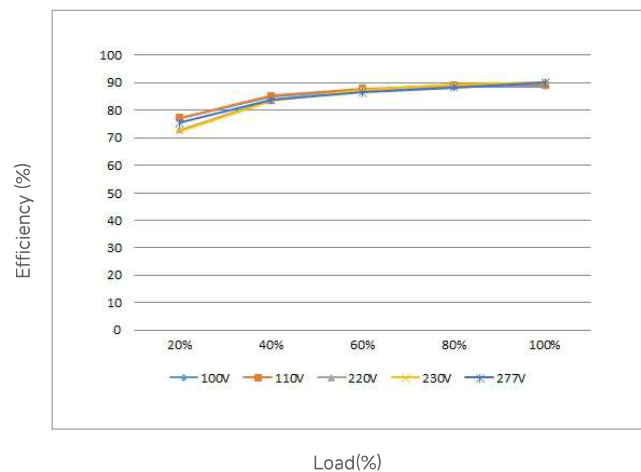
## DVP/DVPL Series

### Constant Voltage Driver Specifications

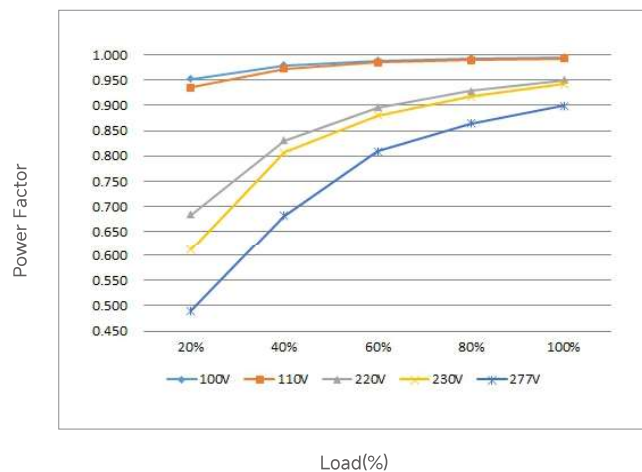
#### Performance vs Load

##### DVP/DVPL-60W-x

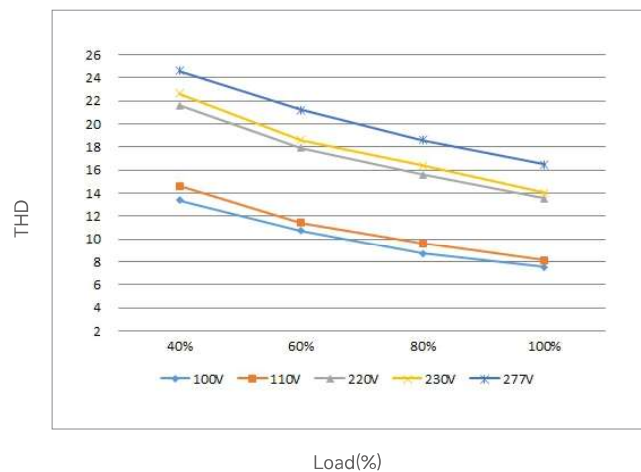
Efficiency vs Load



Power Factor vs Load



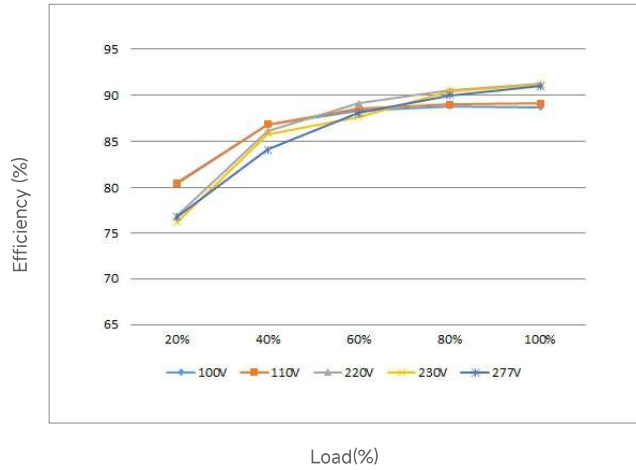
THD vs Load



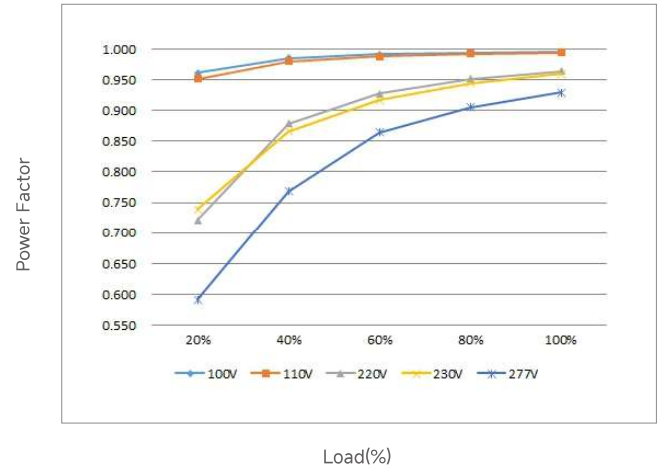
### Performance vs Load

#### DVP/DVPL-96W-x

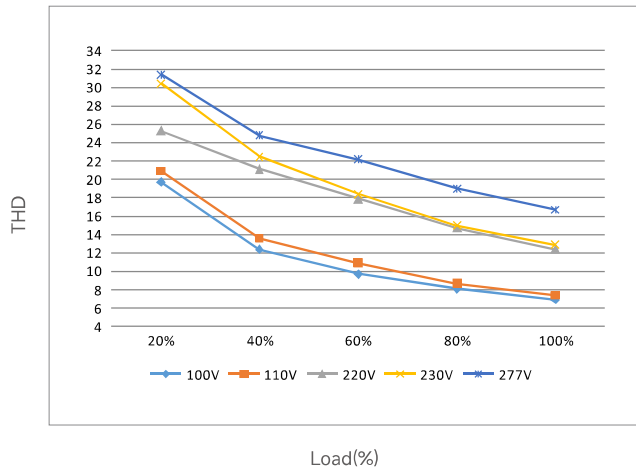
Efficiency vs Load



Power Factor vs Load



THD vs Load



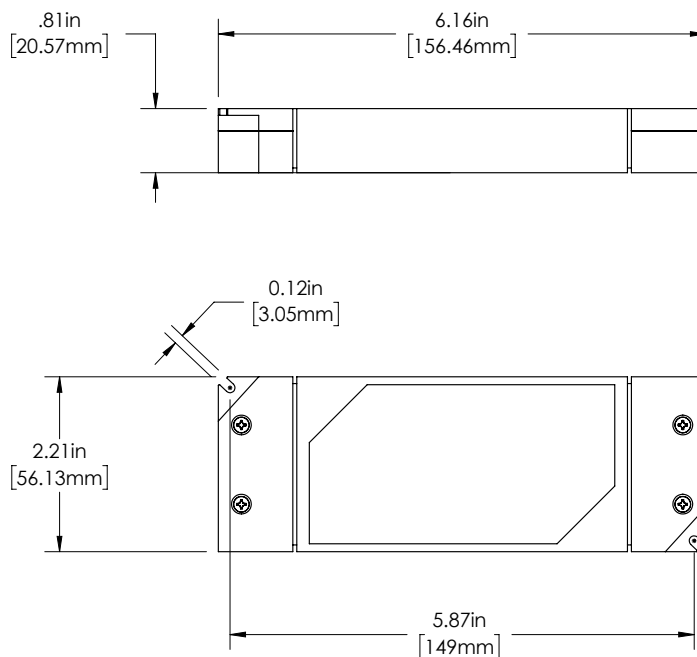


## DVP/DVPL Series

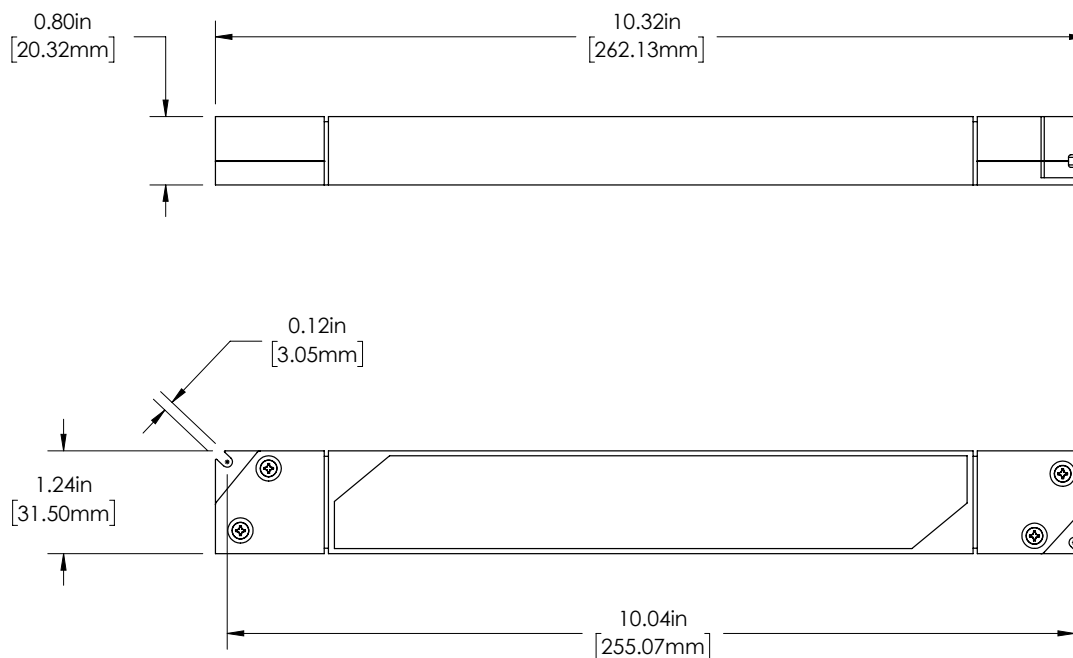
Constant Voltage Driver Specifications

### Dimensional Drawings

#### DVP-30W-xV



#### DVPL-30W-xV



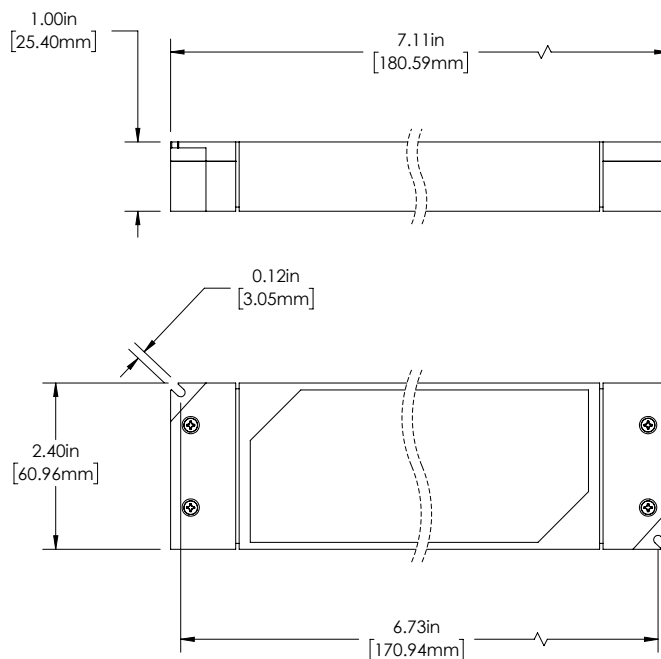


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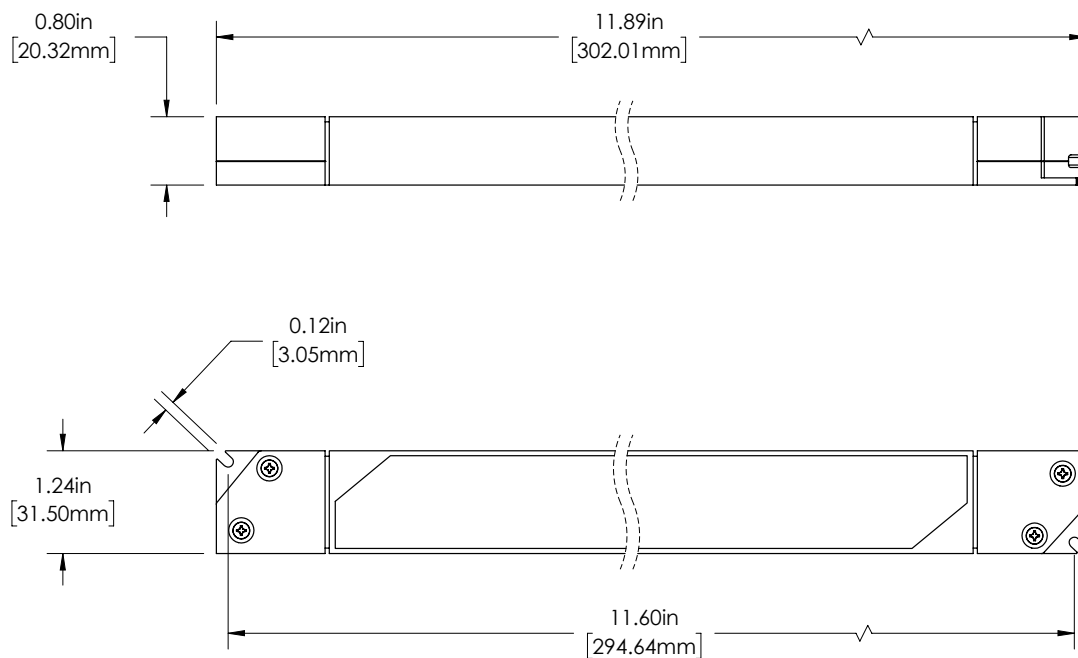
Constant Voltage Driver Specifications

### Dimensional Drawings

#### DVP-60W-xV



#### DVPL-60W-xV



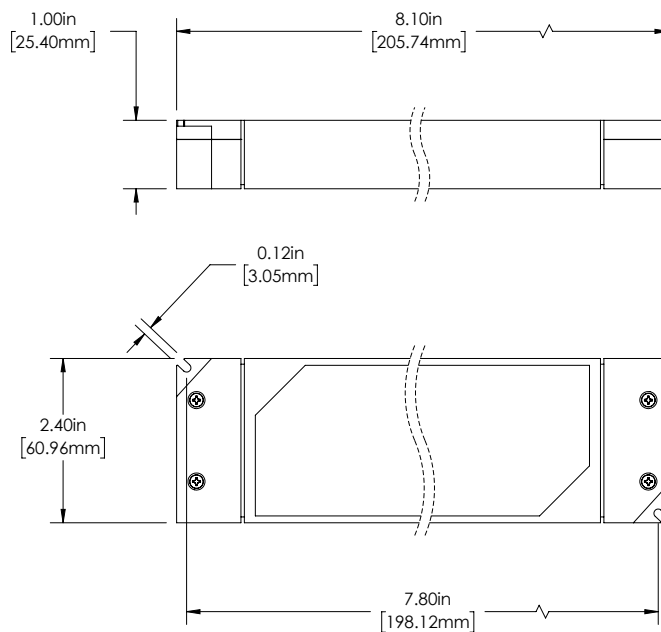


## DVP/DVPL Series

Constant Voltage Driver Specifications

### Dimensional Drawings

#### DVP-96W-xV



#### DVPL-96W-xV

