



## Indoor Class 2 LED Driver

### D050MP501/0V2SM

Description: 50W 0.5A~1.0A 0-10V Dimmable/Programmable Class 2 PSU

Input Voltage: 120-277Vac +/-10% (UL), 230Vac +/-10% (CE)

Input Frequency: 50/60Hz

ROHS Compliant: Yes

| Output Power (W) | Output Current (A) | Output Voltage (V) | Efficiency at full load (277Vac input) | Max Input Current (A)               | Input Power (w) | THD @ 21W Po (277Vac) | PF @ 21W Po (277Vac) | Inrush Current (A/mS) | Surge Protection (kV/kA) | Weight (lbs/g)   |
|------------------|--------------------|--------------------|----------------------------------------|-------------------------------------|-----------------|-----------------------|----------------------|-----------------------|--------------------------|------------------|
| 50               | 0.5 -1.0<br>± 5%   | 21-51              | >90%                                   | 0.51A (UL),<br>0.28A (CE)<br>@ 480V | 58W             | <20%                  | >0.9                 | See Page below        | 3kV/0.25kA               | 1.33lb /<br>602g |

| Dimming Function |           |                   |                |
|------------------|-----------|-------------------|----------------|
| Dimming Method   | Isolation | Dimming Range (%) | Current source |
| 0-10V            | Class 2   | 100% - 10%        | 0.5mA          |

**Wiring Diagram: See label below**

## Product Features

### Physical

- Unit must be installed in compliance with the applicable requirements of the end-product standard for enclosure, mounting, spacing, casualty and segregation.
- Enclosure wiring must be rated to 600V & 105°C or higher.

### Performance

- The unit is classified as Class 2 as stipulated in UL1310.
- Dimming circuit is classified as Class 2 as stipulated in UL1310.
- Minimum ambient operating temperature: -30°C.
- Maximum allowable casing temperature: 80°C.
- For reliability and failure rate information, contact LED Indoor Electronics Team.
- The unit is UL certified for operation in dry/damp locations.

### GE Lighting Solutions

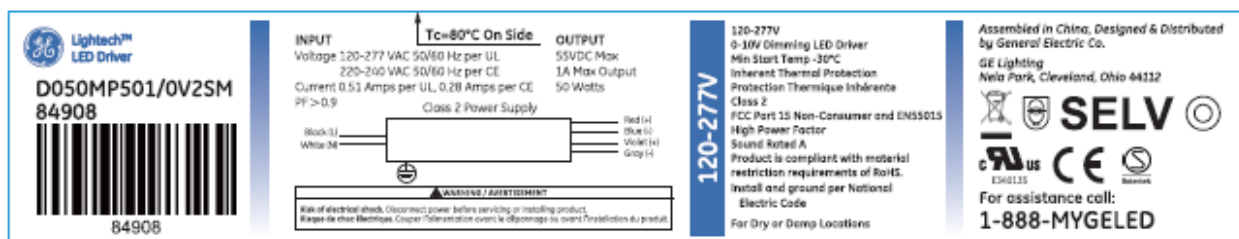
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- The unit is tolerant of extended open circuit and short circuit conditions.
- The unit is compliant to FCC Title 47 Part 15 Class A and EN55015.
- The unit is resistant to surges as per ANSI C62.41 – 2002 and IEC 61000-4-5.

### UL Conditions of Acceptability – E340135

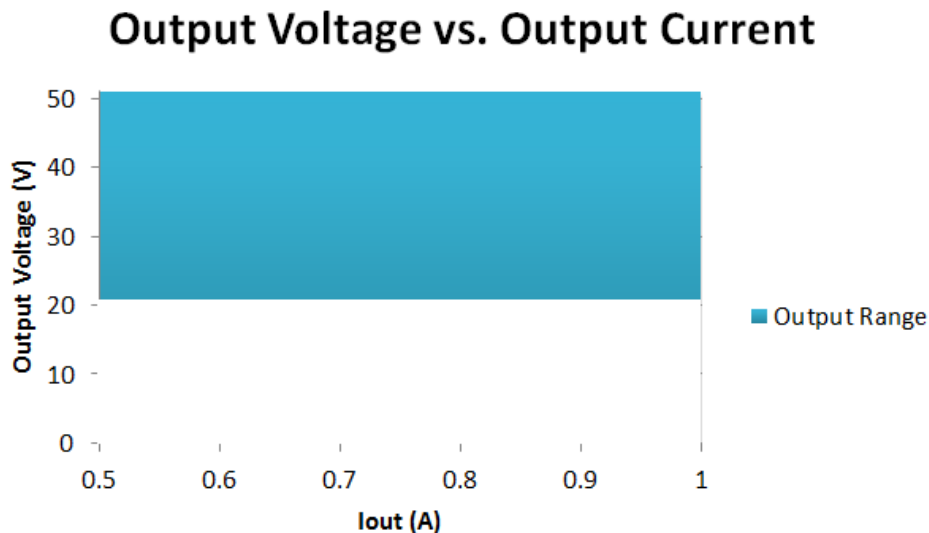
- The unit has been examined to comply with Class 2 Output Criteria
- The unit is only to be used in dry or damp locations
- The metal casing must be connected to **EARTH**.
- The “LED” and “DIM” output circuits must remain isolated from one another to be considered class 2 circuits in the end use.

### Product Label



## Technical Information

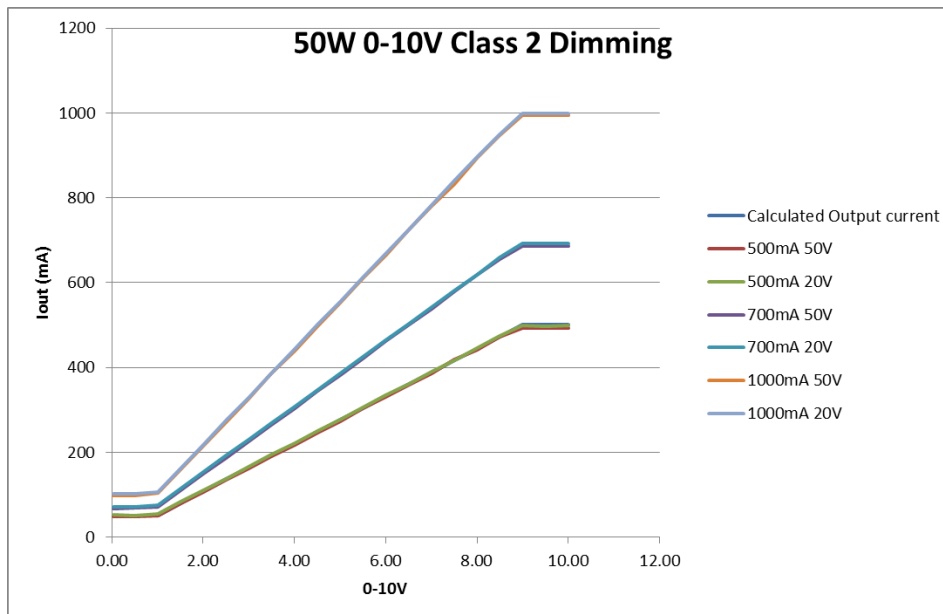
Output Voltage/Current Range (21V – 51V, 0.5A – 1A)



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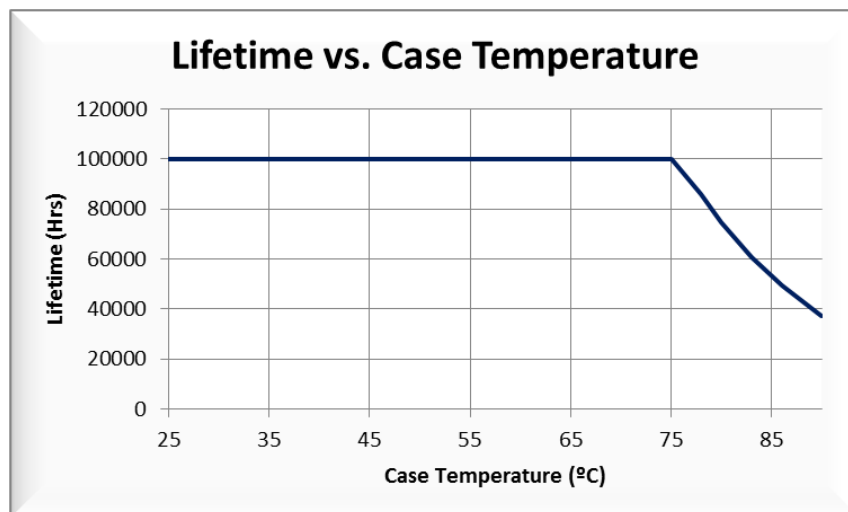
## 0-10V Dimming Curve

Driver sources 0.5mA dimming current. Dimming Level range is from 10% to 100%.



## Technical Information

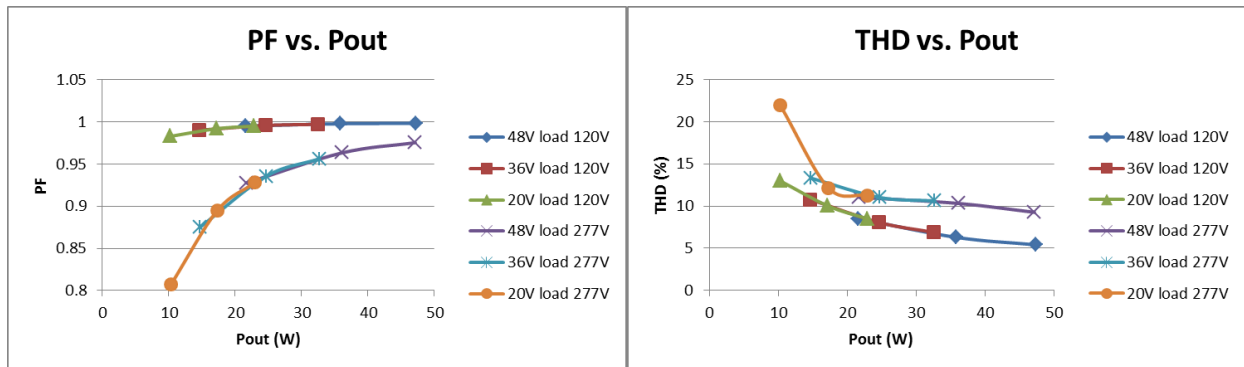
### Lifetime Expectation



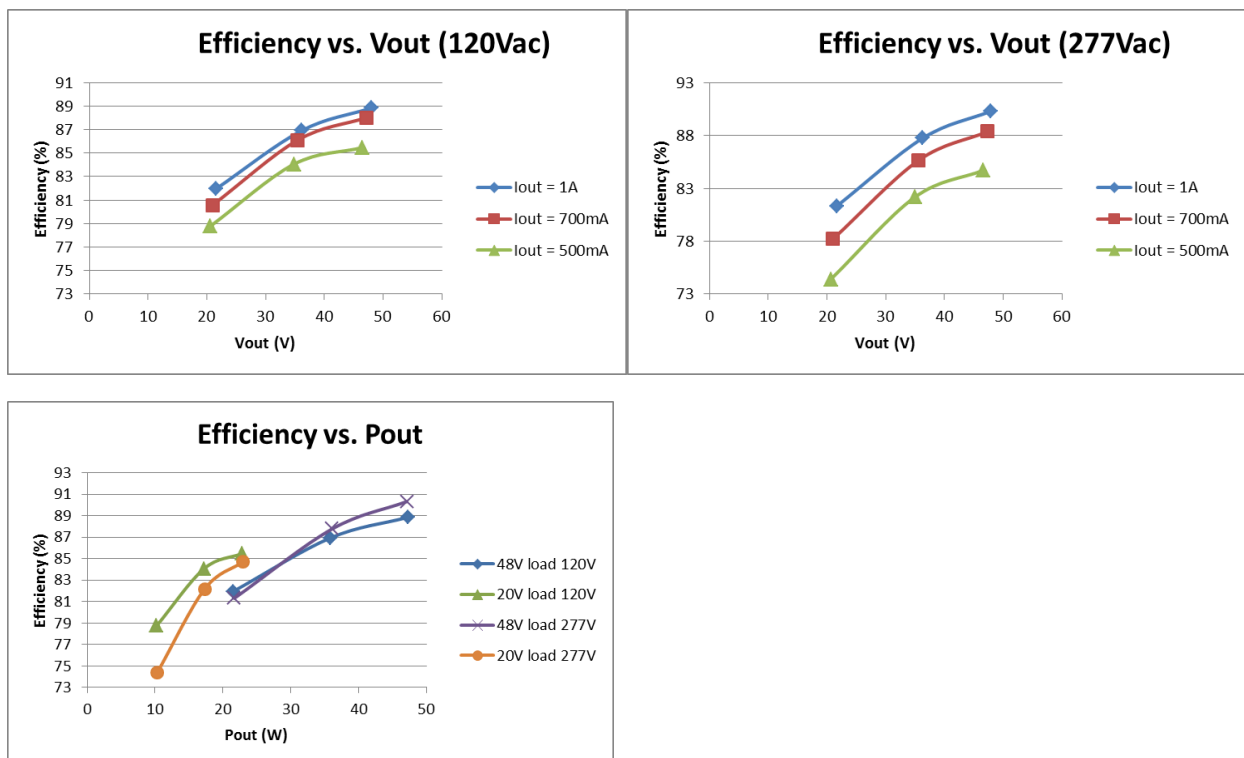
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## Power Factor & Total Harmonics Distortion



## Power Efficiency



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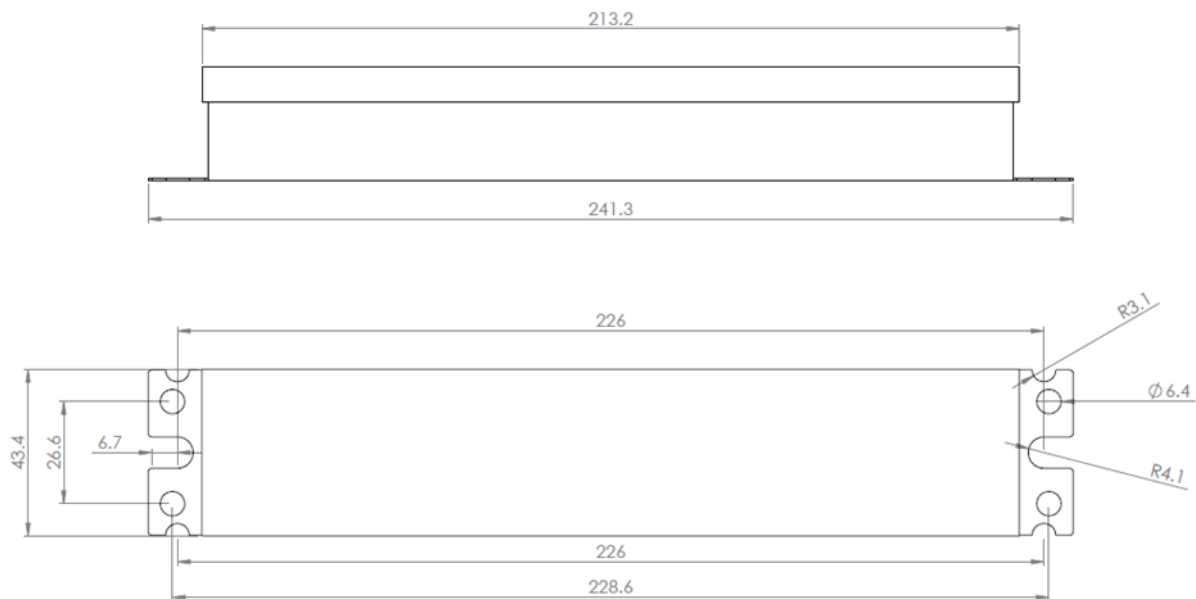
### Input Inrush Current

| Input Inrush Current                 |                                          |                                      |
|--------------------------------------|------------------------------------------|--------------------------------------|
| Input Voltage<br>[V <sub>rms</sub> ] | Peak Current Pulse<br>[A <sub>pk</sub> ] | Pulse Duration (50% of Peak)<br>[us] |
| 120V                                 | 22.4                                     | 107.4                                |
| 277V                                 | 49.6                                     | 131.4                                |

### Leakage Current

| Input Ground Leakage Current         |                      |        |
|--------------------------------------|----------------------|--------|
| Input Voltage<br>[V <sub>rms</sub> ] | Leakage Current (mA) |        |
|                                      | S1 ON                | S1 OFF |
| 120V                                 | 0.27                 | 0.27   |
| 240V                                 | 0.56                 | 0.56   |
| 277V                                 | 0.6                  | 0.6    |

## Product Dimensions

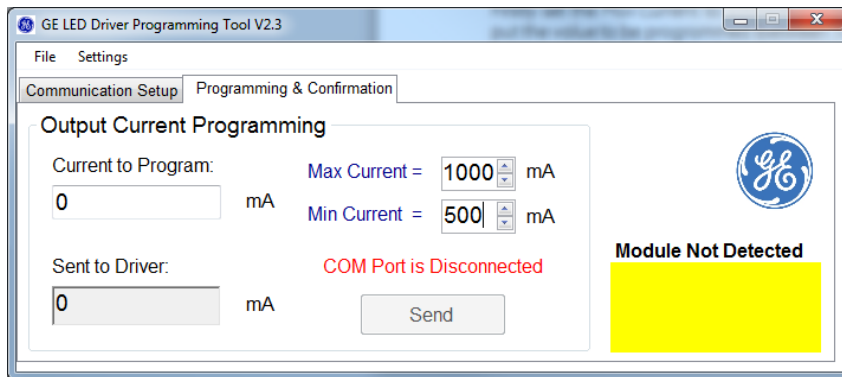


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## Current Programming Interface

Firstly set the Max Current to 1000mA and the Min Current to 500mA in the input box, then put the value to be programmed (between 500mA to 1000mA) into the input box for Current to Program, finally click the Send button to complete the programming of driver.



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