

## LED 5-in-1 Dimmable Driver (CV)

5 in 1 dimming  
 0-10V  
 1-10V  
 10V PWM  
 TRIAC DIM  
 Resistance DIM

- TRIAC/ 0-10V/1-10V/10V PWM/RESISTANCE DIM
- Dimming range: 0~100%, LED start at 0.1% possible.
- 0-100% flicker-free, High frequency exemption level.
- High Efficient driver: efficiency 93%.
- Over load / Over temp. / Short circuit / Over voltage protection, recover automatically.
- Up to 50000-hour life time.



**Flicker-free**  
 IEEE 1789  
 High frequency exemption level

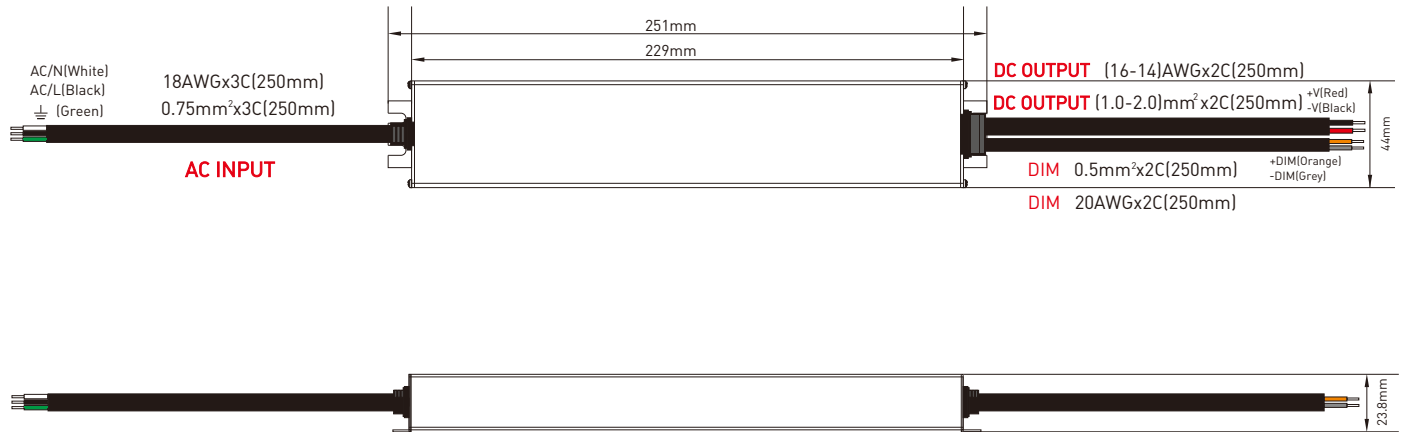


### Specification

| Model        |                          | GL-CVP12-200W-WPDIM   | GL-CVP24-200W-WPDIM   |
|--------------|--------------------------|---|---|
| OUTPUT       | Output voltage           | 12VDC   | 24VDC   |
|              | Output voltage range     | 12VDC±3%  | 24VDC±2%  |
|              | Output current           | Max 16.7A   | Max 8.34A   |
|              | Output power             | Max 200W  |   |
|              | Output power range       | 0~200W  |   |
|              | With or without strobe   | No strobe   |   |
|              | Dimming range            | 0~100%, dimming depth: Max. 0.1%  |   |
|              | Ripple & Noise           | ±2%   |   |
|              | PWM frequency            | 700hz-16Khz   |   |
| INPUT        | Dimming interface        | Traic/0-10V/1-10V/10V PWM/RESISTANCE DIM(0-100K)  |   |
|              | Input voltage            | 100-130Vac  |   |
|              | Frequency                | 60Hz  |   |
|              | Input current            | 4AMax.  |   |
|              | Power factor             | PF>0.55/115Vac, at full load  |   |
|              | Efficiency (typ.)        | > 85%   |   |
|              | Inrush current(typ.)     | Cold start 80A at 115Vac  |   |
|              | Control surge capability | L-N:1.5KV   |   |
|              | Leakage current          | Max. 0.5mA  |   |
| ENVIRONMENT  | Working temperature      | ta: -40°C ~ 45°C tc: 90°C   |   |
|              | Working humidity         | 20 ~ 95%RH, non-condensing  |   |
|              | Storage temp., humidity  | -40°C ~ 80°C, 10~95%RH  |   |
|              | Vibration                | 10~500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes.  |   |
| PROTECTION   | Overtemperature          | Protection type:Shut down o/p voltage,re--power on to recover   |   |
|              | Over voltage protection  | Shut down the output when non-load voltage≥13.5-18V, re-power on to recover after fault condition is removed.   | Shut down the output when non-load voltage≥27-35V, re-power on to recover after fault condition is removed. |
|              | Over load protection     | Shut down the output when current load ≥ 120%, auto recovers  |   |
|              | Short circuit protection | Protection type:<br>1. When the first-level short-circuit protection is triggered, the fault can be automatically recovered;<br>2. When the second-level short-circuit protection is triggered, the power needs to be turned on again after the fault is eliminated |   |
| SAFETY & EMC | Withstand voltage        | I/P-O/P: 3750Vac  |   |
|              | Isolation resistance     | I/P-O/P: 100MΩ/500VDC/25°C/70%RH  |   |
|              | Safety standards         | IEC/EN61347-1, IEC/EN61347-2-13   |   |
|              | EMC emission             | EN55015, EN61000-3-2 Class C, IEC61000-3-3  |   |
|              | EMC immunity             | EN61000-4-2,3,4,5,6,8,11 EN61547  |   |
|              | Strobe test standard     | IEEE 1789   |   |

## Dimensions

Unit: mm



## Wiring diagram

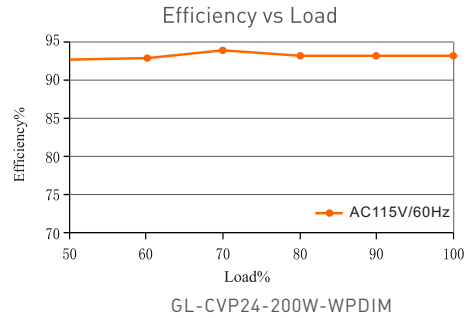
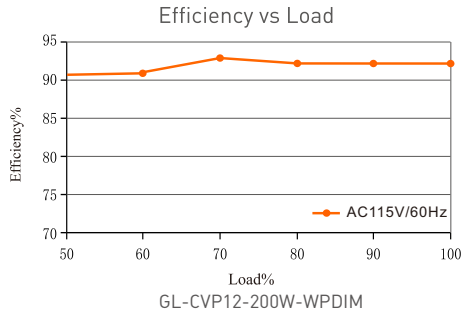
### 1-10V/10V PWM Dimming diagram



### TRIAC Dimming diagram



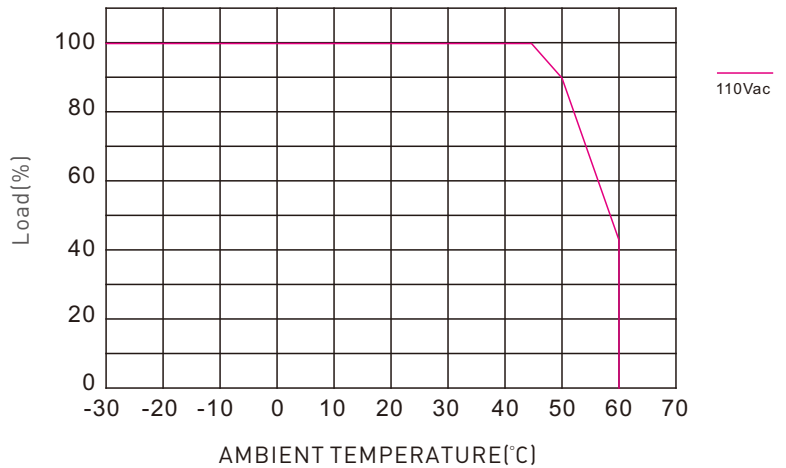
## Relationship diagrams



## Packaging Information

|                 |                    |
|-----------------|--------------------|
| DIMENSION       | 251*44*24mm(L*W*H) |
| PACKING         | mm(L*W*H)          |
| CARTON QUANTITY | PCS                |
| CARTON SIZE     | mm(L*W*H)          |
| WEIGHT          | 535±10gPCS         |

## Temperature load curve



## Flicker Test Form

Exemption assessment  
(High frequency exemption)

### IEEE 1789

| Limit of Modulation in low risk area  |  |
|---------------------------------------|--|
| Waveform frequency of Optical output  | limit (%)  |
| $f \leq 8\text{Hz}$                   | 0.2  |
| $8\text{Hz} < f \leq 90\text{Hz}$     | $0.025 \times f$                                   |
| $90\text{Hz} < f \leq 1250\text{Hz}$  | $0.08 \times f$                                    |
| $f > 1250\text{Hz}$                   | Exemption assessment                               |
| Limit of Modulation in no effect area |  |
| Waveform frequency of Optical output  | limit (%)  |
| $f \leq 10\text{Hz}$                  | 0.1  |
| $10\text{Hz} < f \leq 90\text{Hz}$    | $0.01 \times f$                                    |
| $90\text{Hz} < f \leq 3125\text{Hz}$  | $(0.08/2.5) \times f$                              |
| $f > 3125\text{Hz}$                   | Exemption assessment<br>(High frequency exemption) |

Brightness

- ◆ 1%
- ▲ 5%
- ◆ 10%
- 20%
- ▲ 30%
- 40%
- ★ 50%
- 60%
- 70%
- 80%
- ★ 90%
- ◆ 100%

