OMNILED

LED 5-in-1 Dimmable Driver (CV)

5 in 1dimming
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

SELV IP67

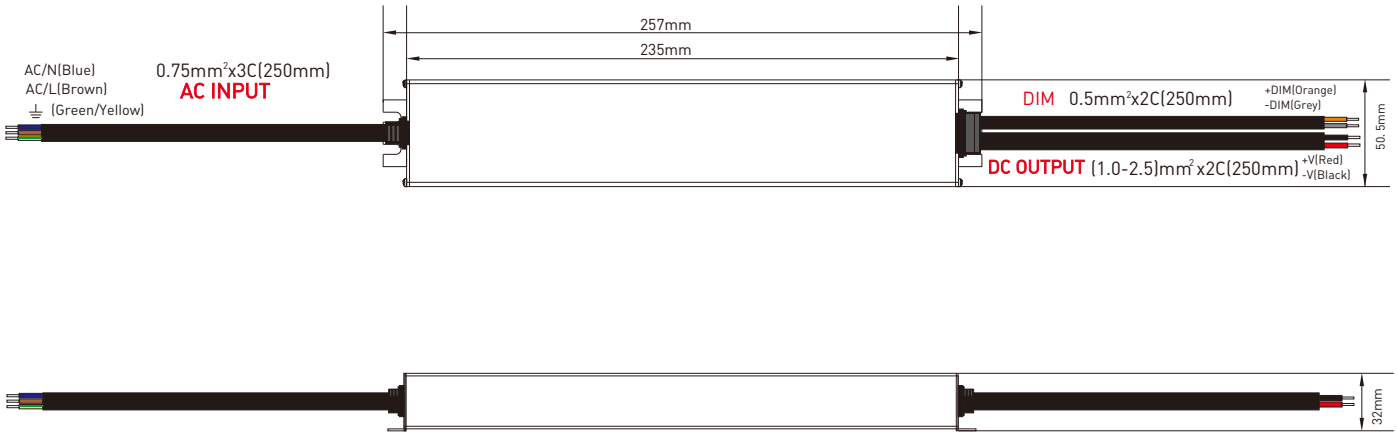
0-10V 1-10V DIM | Triac/ Resistance DIM | PWM Digital Dimming | 0.1% Depth Dimming | Over-heat Protection | Short Circuit Protection | Over Load Protection | V Over voltage protection

Specification

Model		PVD-300-12	PVD-300-24	PVD-300-36	PVD-300-48
OUTPUT	Output voltage	12VDC	24VDC	36VDC	48VDC
	Output voltage range	12VDC±3%	24VDC±2%	36VDC±2%	48VDC±2%
	Output current	Max 25A	Max 12.5A	Max 8.33A	Max 6.25A
	Output power	Max 300W			
	Output power range	0~300W			
	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	176-264Vac			
	Frequency	50Hz			
	Input current	2.6AMax.			
	Power factor	PF>0.55/230Vac, at full load			
	Efficiency (typ.)	92%	93%	93%	93%
	Inrush current(typ.)	Cold start 80A at 230Vac			
	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.	Shut down the output when non-load voltage≥40-50V, re-power on to recover after fault condition is removed.	Shut down the output when non-load voltage≥52-63V, 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: 1. When the first-level short-circuit protection is triggered, the fault can be automatically recovered; 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

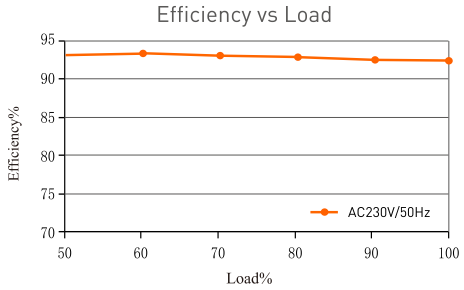


Wiring diagram

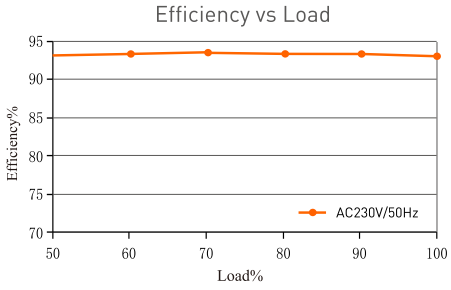
1-10V/10V PWM Dimming diagram

TRIAC Dimming diagram

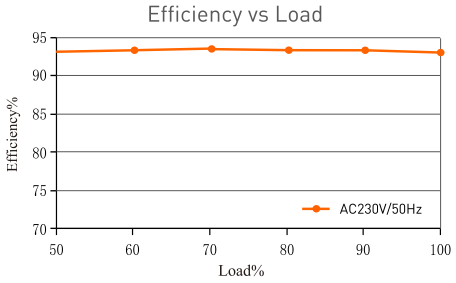
Relationship diagrams



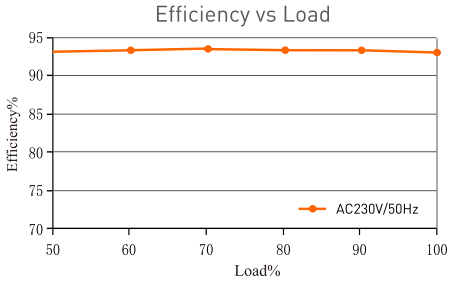
PVD-300-12



PVD-300-24



PVD-300-36

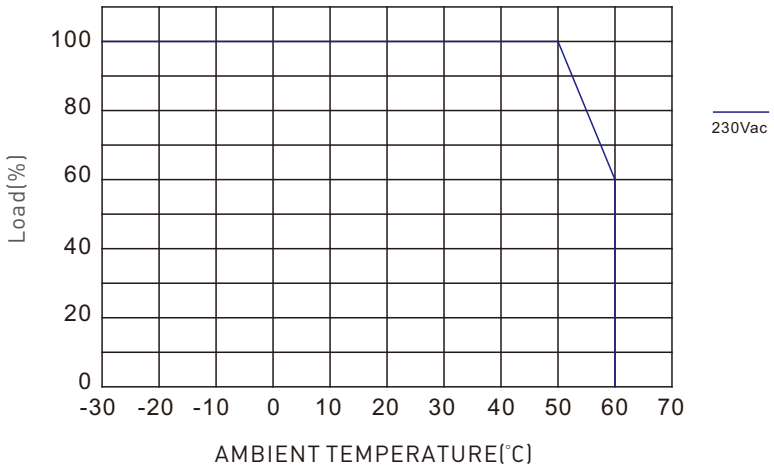


PVD-300-48

Packaging Information

DIMENSION	257x50.5x32mm(LxWxH)
PACKING	mm(LxWxH)
CARTON QUANTITY	PCS
CARTON SIZE	mm(LxWxH)
WEIGHT	745±10gPCS

Temperature load curve



Flicker Test Form

IEEE 1789

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

Brightness

1%
5%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%

Exemption assessment
(High frequency exemption)