HP300 IP67 Series

300W Waterproof 5 in 1 Dimmable LED Driver

Features:

- Input Voltage: 200-240V
- Built in active PFC, typical power factor>0.95
- High efficiency: up to 92%
- Load: 0.01-100%
- IP67 Design, Flicker-free
- Protection: Short Circuit/Over Loading/Over Temperature
- Full protection metal case
- Flicker Free

CE RoHS Compliant SELV

Model No	Power	Output Voltage	Output Current	Weight	Size (L*W*H)
HP300-24-67	300W	24V	12.5A	1.8kg	304.4*78*46mm

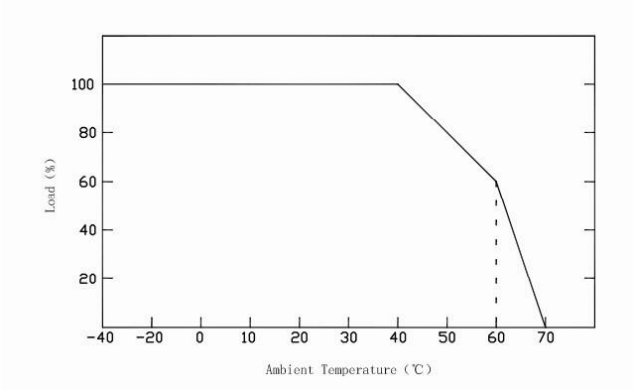
Input	Input Voltage:	220-240VAC
	Input Frequency:	50/60Hz
	Power Factor (Typ.):	@ full load 0.98@277VAC
	THD (Typ.) @ full load	<20% @277VAC
	Efficiency (Typ.) @ full load	24V 90% @ 277Vac
	Inrush Current (Typ.)	35A, 50% 1.9ms @277VAC
	Leakage Current	<0.50mA
Output	DC Voltage	24V
	Rated Current	12.5A
	Rated Power	300W
	Voltage Tolerance	±0.5V
	Voltage Regulation	±0.5%
	Load Regulation	±1%
Protection	Short Circuit	Hiccup mode, recovers automatically after fault condition is removed
	Over Loading	≤120%
	Over temperature	100°C±10°C,Shut down o/p voltage, recover automatically after temperature goes down.
Environment	Working TEMP.	-40~+60°C
	Working Humidity	20~90%RH, non-condensing
	Storage TEMP. Humidity	-40~+80°C, 10~95%RH
	TEMP .co efficient	±0.03%/°C (0~50°C)
	Vibration	10~500Hz, 5G 10min./1 cycle,period for 60min. each along X,Y,Z axes
Safety & EMC	Withstand Voltage	I/P-O/P:1.88KVAC
	Isolation Resistance	I/P-O/P:100MΩ/500VDC/25°/70%RH
	EMC Emission	FCC Part 15 B

Product Advantages:

- Multiple Dimming Modes: Triac (Forward phase & reverse phase, MLV ELV dim) /0-10V/1-10V/10V PWM/ Potentiometer
- Switch to PWM or Voltage regulation output
- 100%-0.01% dimmable, stepless dimming, flicker-free
- Metal shell NEMA 4X for indoor and outdoor use
- Super low loading request, works perfect at 0.01-100% load
- No Vpeak-peak during driver on/off and dimming, no harm to the LED for long-term use and slow lumen depreciation

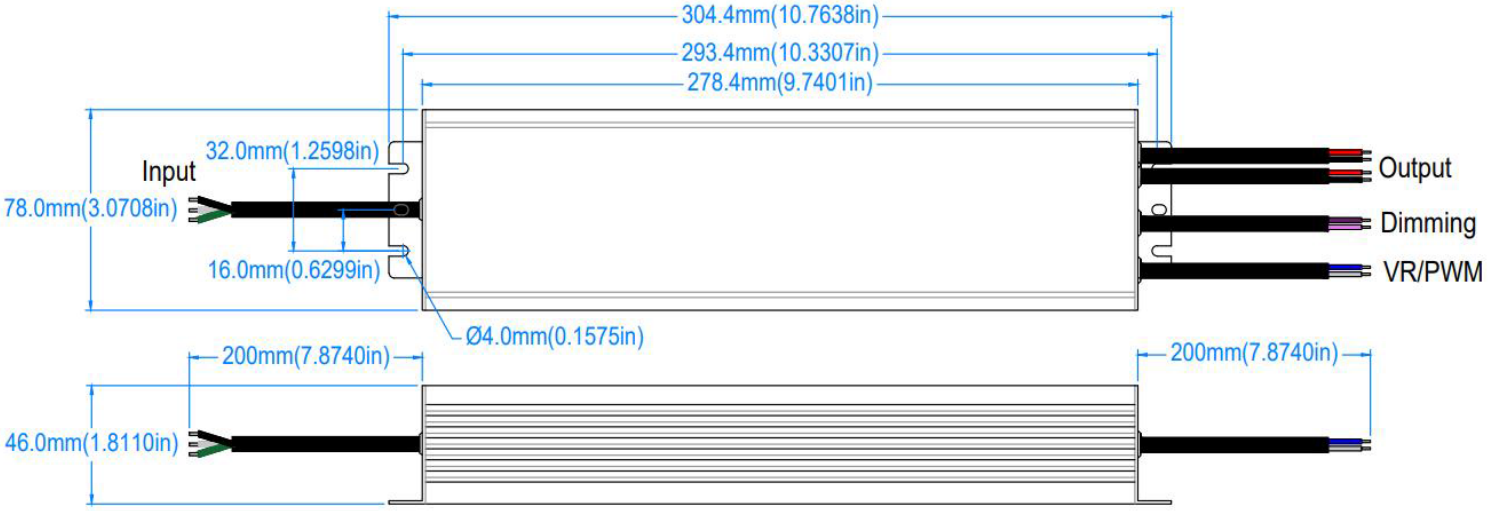
Derating Curve

To extend the life, please refer to the Derating Curve and derate according to the temperature.



Dimensions

Unit: mm
Tolerance: 0.5-2mm



- Input wire Black and White to be connected to AC L and N ,Green wire go ground,
- Output wire Red to LED Positive side (+) , Black to LED Negative side (-).
- Dimming cable DIM (+) Purple to 0/1-10V dimmer signal(+),DIM (-) Pink to 0/1-10V dimmer signal (-)
- Please make sure your connect these correctly otherwise your product will not function correctly and could be damaged.

Wiring Diagram for Triac/Phase cut dimming

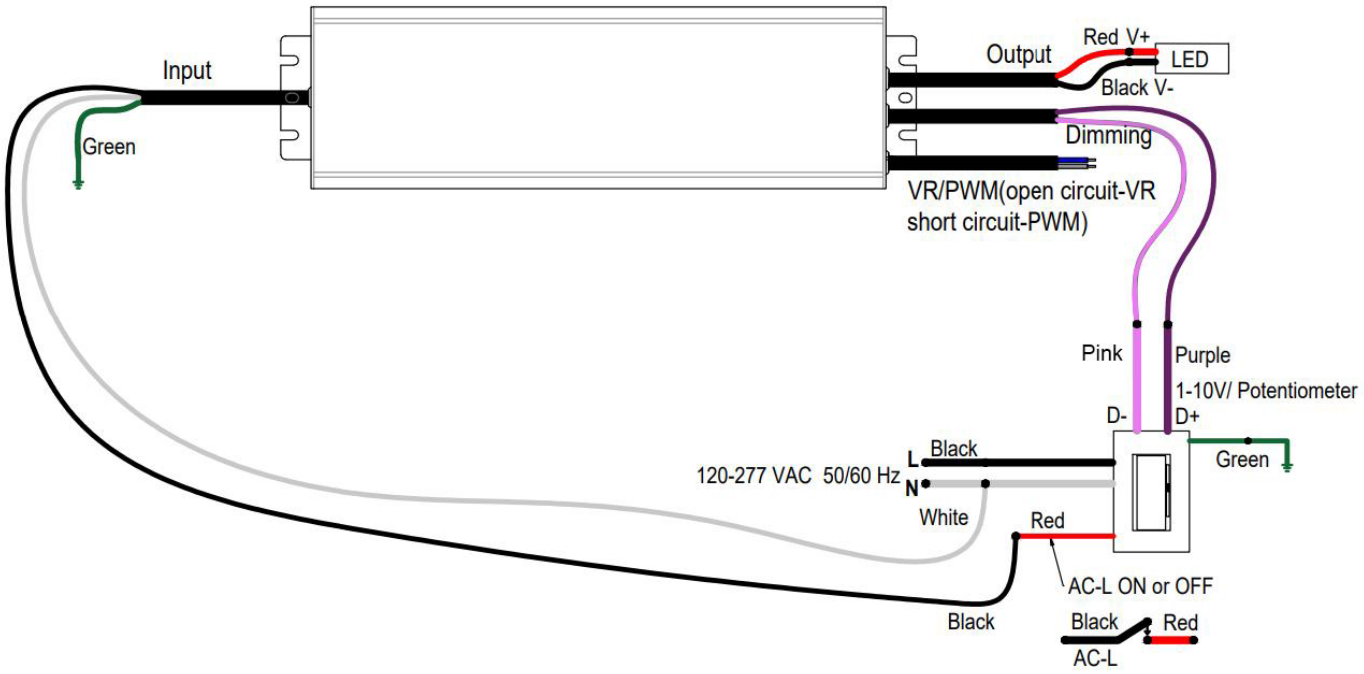
1. The Pulse-Width Modulation (PWM) of output voltage can be adjusted through the input terminal of the AC phase line (L) by connection of a phase/Triac dimmer
2. Works with forward phase/leading edge, MLV and reverse phase/trailing edge, ELV, TRIAC dimmers
3. Please try to use dimmers with power at least 1.5 times as the output power of the driver

Using Triac MLV wiring diagram

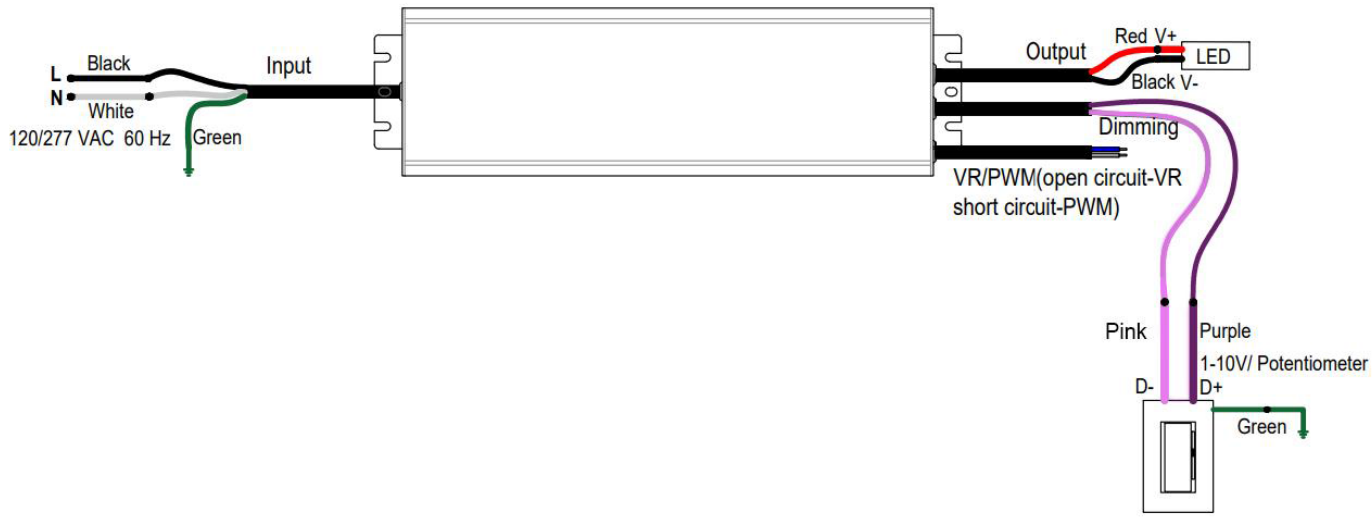
Using Triac ELV wiring diagram

Using 0-10/1-10v wiring diagram (the power does not pass through the dimmer)

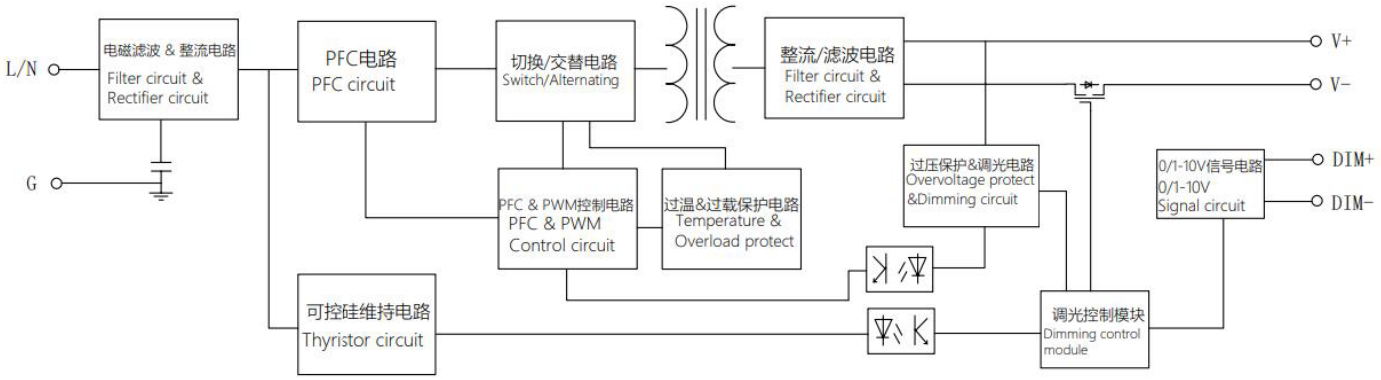
Using 0-10/1-10v wiring diagram (power supply through the dimmer switch)



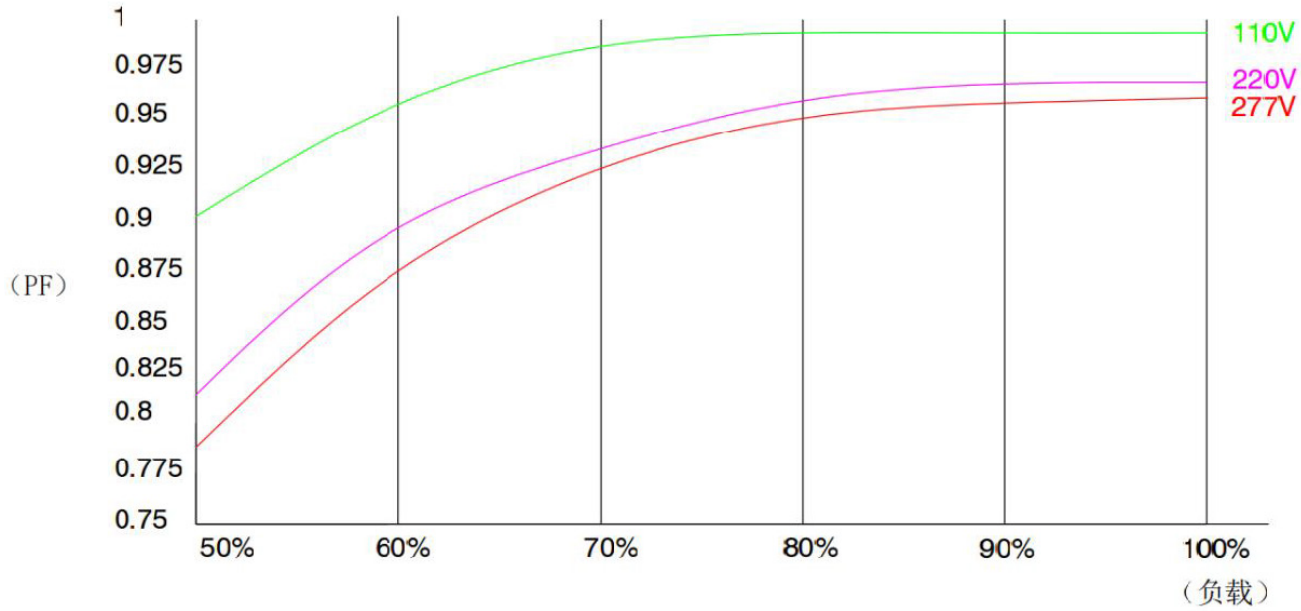
Using 0-10/1-10v wiring diagram (the dimmer is not connected to high voltage)



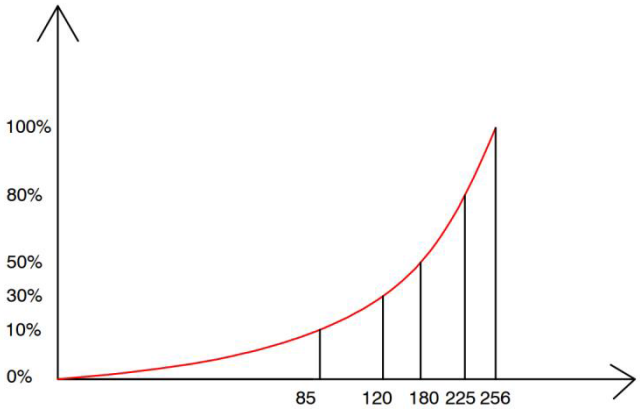
The Topology



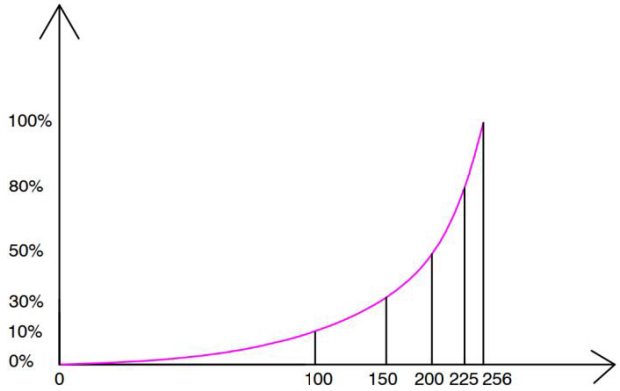
PFC load graph



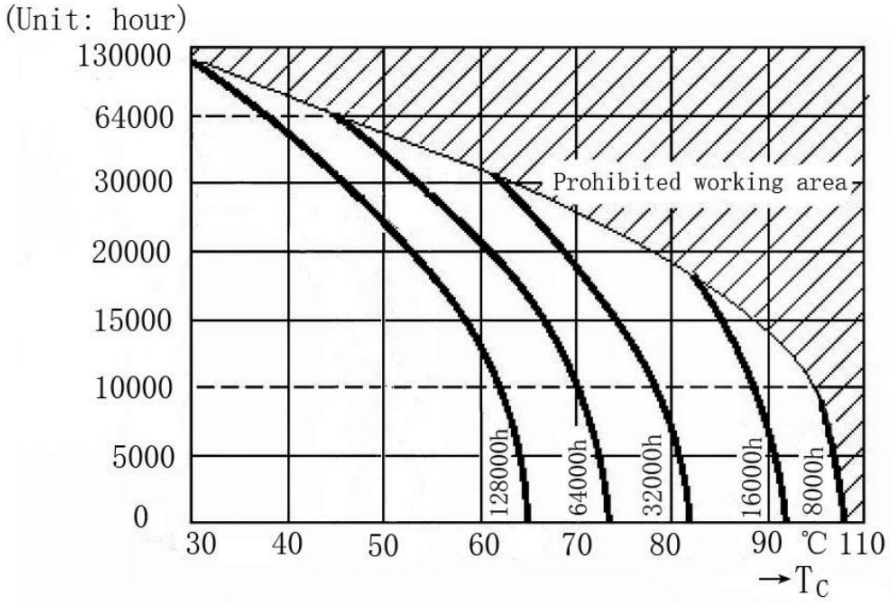
PWM dimming curve



VR dimming curve



Instruction

- This driver should be installed by a qualified and professional person
- Please make sure the driver is installed with adequate ventilation around it to allow for heat dissipation
- Ensure the wiring is correct before testing in order to avoid light and power supply damage

Power supply operating temperature and life curve