Size (L\*W\*H)



**Model No** 

# **HP300 IP67 Series**

300W Waterproof 5 in 1 Dimmable LED Driver



**Output Voltage** 

**Power** 

#### **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

Weight

Flicker Free

$\epsilon$	1	RoHS Compliant	SEL	V
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**Output Current** 

Modelino	IOWEI	Output vo	riuge	Output Current	Weight	OIZC (L W II)		
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 temperat	ture		±10°C,Shut down o/ rature goes down.	p voltage, reco	over automatically after		
Environment	Working TEM	IP.	-40~+	60°C				
	Working Hum	nidity	20~90%RH, non-condensing					
	Storage TEMP	P. Humidity	-40~+	80°C, 10~95%RH				
	TEMP .co effic	cient	±0.03°	±0.03%/°C (0~50°C)				
	Vibration		10~50	0Hz, 5G 10min./1 cycle,period for 60min. each along X,Y,Z axes				
Safety & EMC	Withstand Vol	ltage	I/P-O/P:1.88KVAC					
	Isolation Resis	stance	I/P-O/P:100MΩ/500VDC/25°/70%RH					
	EMC Emission	n	FCC Part 15 B					

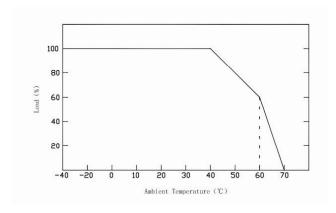


### **Product Advantages:**

- 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 304.4mm(10.7638in) 293.4mm(10.3307in) 278.4mm(9.7401in) 32.0mm(1.2598in) Output Input 78.0mm(3.0708in) = Dimming 16.0mm(0.6299in) ■ VR/PWM Ø4.0mm(0.1575in) 200mm(7.8740in) 200mm(7.8740in) 46.0mm(1.8110in)

- 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

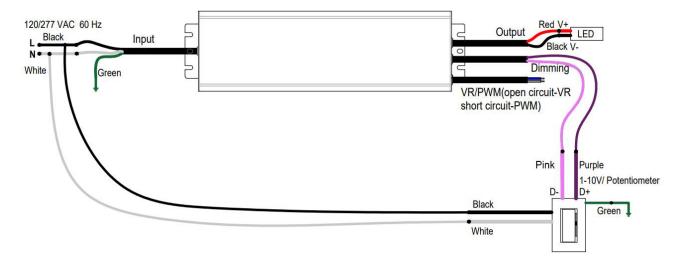
### Using Triac MLV wiring diagram



### Using Triac ELV wiring diagram

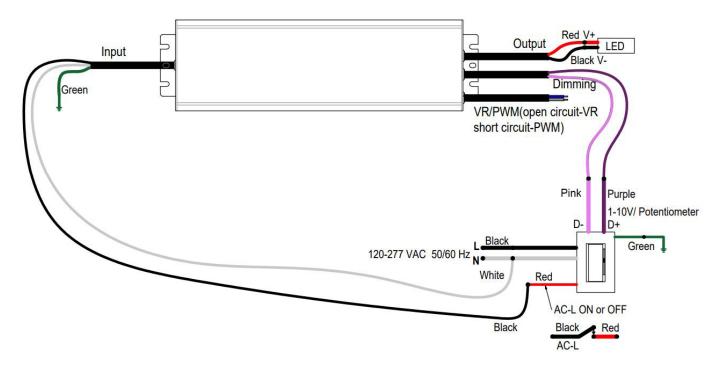


Using 0-10/1-10v wiring diagram (the power does not pass through the dimmer)

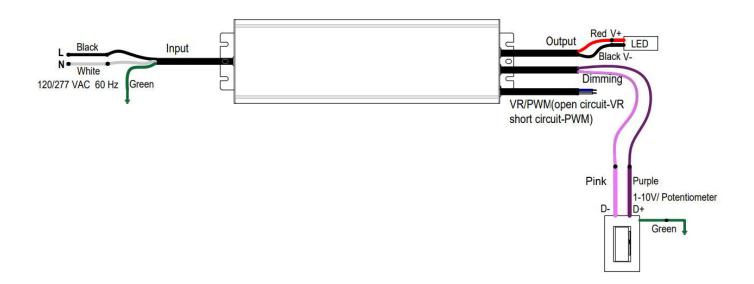




Using 0-10/1-10v wiring diagram (power supply through the dimmer switch)

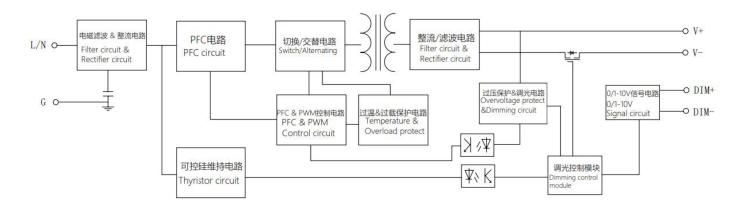


Using 0-10/1-10v wiring diagram (the dimmer is not connected to high voltage)

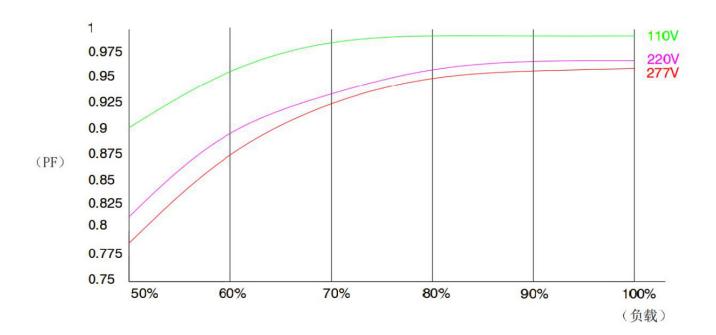




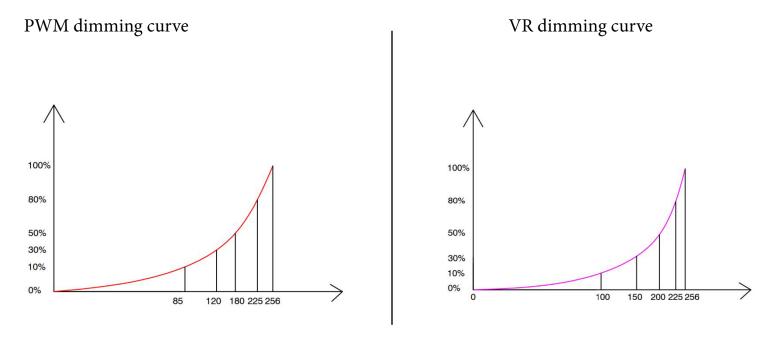
# The Topology



# PFC load graph







#### 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

