

## Class 2 muti-channels 288W 300W

# 0-10V/1-10V/Potentiometer/10V PWM (4 in 1) Dimmable led driver



#### **■** Features:

- ·Output constant voltage
- ·Range:100-305VAC, Typical: 110-277VAC
- ·Built-in PFC function, PF>0.95
- ·Efficiency > 91%
- ·Protections:short circuit/over voltage/over temperature
- ·Cooling by free air convection
- ·Dimming function:0-10V/ 1-10V/ 10V PWM or Resistor dimmable.
- ·Suitable for LED lighting and moving sign applications
- ·Compliance to worldwide safety regulations for lighting
- · PWM output, does not change the color index
- · Dimming range: 0-100%
- ·Suitable for dry/damp/wet locations / 7 years warranty



## **Specification**

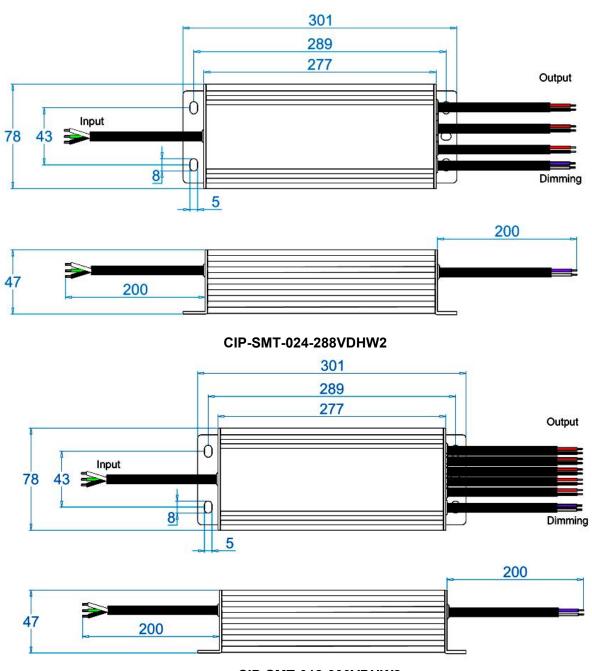


	Model	CIP-SMT-012-300VDHW2	CIP-SMT-024-288VDHW2							
	DC Voltage	12V	24V							
	Voltage Tolerance	±0.5V								
	Voltage Regulation	±0.5V								
Output	Voltage Tolerance	±0.5%								
	Load Regulation	±1.2%	±1%							
	Rated current	3*4A	5*5A							
	Rated power	300W (5*60W)	288W (3*96W)							
	Voltage Range	10	00-277VAC							
	Frequency Range	4	17∼63HZ							
	Power Factor (Typ.)@ full load	0.98@120VAC 0.97@277VAC	0.98@120VAC 0.97@277VAC							
	THD(Typ.)@ full load	<20%								
Input	Inrush Current (Typ.)	35A ,50%,960us @120VAC ; 43A,50%,1ms @277VAC								
	Full Load	87%@120V 91%@277VAC	85%@120V 90%@277VAC							
	Efficiency (Typ.)	79%								
	AC Current (Typ.)	3.4A@100VAC	3.6A@100VAC							
	Leakage current	<0.50mA								
	Short Circuit	shut down o/p voltage, re-power on to recover after fault condition is removed								
Protection	Over load	≤120% Hiccup mode ,recovers automatically after fault condition is removed								
	Over temperature	100℃±10℃ shut down o/p voltage, automatically recover after cooling.								
	Working TEMP.	-40∼+60℃ (see below derating curve)								
Environment	Working Humidity	20∼90%RH, non-condensing								
Environment	Storage TEM.,Humidity	-40∼+80℃,10∼95%RH								
	TEMP.coefficient									



	Vibration	10∼500Hz, 5G 10min./1 cycle,period for 60min. each along X,Y,Z						
		axes						
	Safety standards	UL8750+UL1310						
	Withstand voltage	I/P-O/P:1.88KVAC						
	Isolation resistance	I/P-O/P:100MΩ/500VDC/25°C/70%RH						
Safety&EMC	EMC EMISSION	FCC 47 CFR Part 15 ,Subpart B						
	Weight	1.9Kg						
Others	Size	303*78*47mm (L*W*H)						
	packaging	10PCS/CTN						
	1. All parameters NOT specially mentioned are measured at 120VAC & 277vac input , rated load and 25°C of							
Notes	ambient temperature.							
	2. Tolerance:includes set us tolerance,line regulation and load regulation .							

# ■Mechanical Specification



CIP-SMT-012-300VDHW2



- \* Input wire 18AWG Black and White to be connected to AC L and N, Green wire go ground,
- Output cable 2\*16AWG,Red" (+) to LED Positive side (+), "Black"(-) to LED Negative side (-).
  Three groups output cables. of CIP-SMT-024-288VDHW2 and five groups of CIP-SMT-012-300VDHW2.
- X Dimming cable 2\*18AWG,DIM (+) Purple to 0/1-10V dimmer signal(+),DIM (-) Grey to 0/1-10V dimmer signal (-)
- \*\* Please DO NOT connect "DIM-" to "LED-", "DIM+" to "LED+" ,or other incorrect connection.
- ※ Please make sure your connect these correctly otherwise your product will not function correctly and could be damaged.

## ■Dimming Operation

- \*\*Built-in 4 in 1 dimming function, I67 rated .Output constant current level can be adjusted through output cable by connection a resistance or 1-10V DC or 10V PWM signal between DIM+ and DIM-
- \*Reference resistance value for output current adjustment (Typical)

Resistance	Signal driver	0Ω	10ΚΩ	20ΚΩ	30ΚΩ	40ΚΩ	50ΚΩ	60ΚΩ	70ΚΩ	80ΚΩ	90ΚΩ	100ΚΩ	OPEN
value	Multiple drive	0Ω/N	10KΩ/N	20KΩ/N	30KΩ/N	40KΩ/N	50KΩ/N	60KΩ/N	70KΩ/N	80KΩ/N	90KΩ/N	100ΚΩ/Ν	
Percentage of rated current		0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	102%-108%

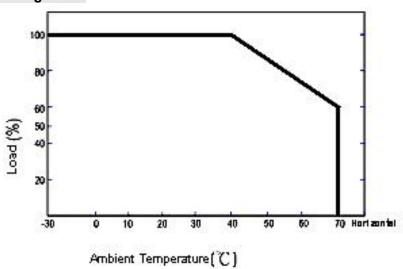
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Dimming value	0V	1V	2V	3V	4V	5V	6V	7V	8V	9V	10V	OPEN
Percentage of rated current	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	102%-108%

#### \*\*10V PWM signal for output current adjustment (Typical): Frequency range:100Hz-3KHZ

Duty value	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	OPEN
Percentage of rated current	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	102%-108%

#### **■**Derating Curve



\*Load carried in accordance with the load derating curve, according to the ambient temperature derating, in order to extend the working life.

#### ■ 0/1-10V / Potentiometer / 10V PWM (4 in 1) Dimmable LED Driver connecting solution:



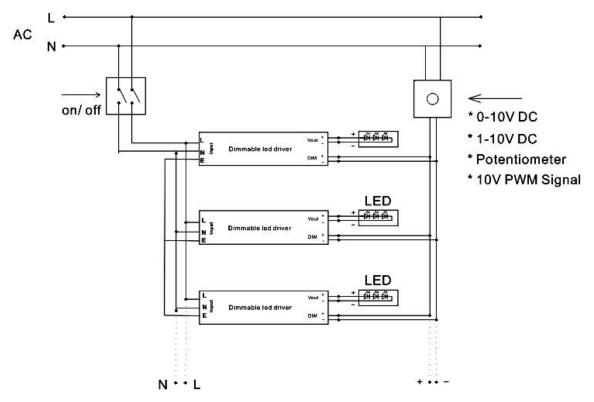
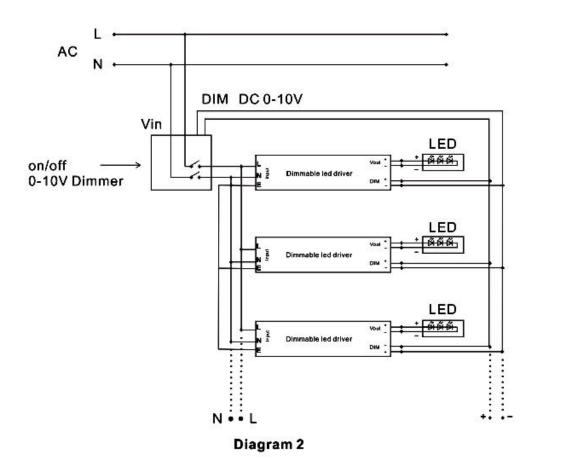


Diagram 1

## Diagram 2 as below:





### ■ Instruction:

- \*\*This driver should be installed by qualified and professional person;
- XPlease make sure the driver is installed with adequate ventilation around it to allow for heat dissipation.
- XEnsure that wiring is correct before test in order to avoid light and power supply damage;
- % If the dimmable LED drivers do not work normally, pl. don't maintain privately, but contact us.