

OWP120-2W12V-T

Product Features

- Dual-channel constant voltage output, per channel 5A Max
- Input Voltage Range 120-277Vac
- Protection: short circuit, Overload, Overcurrent, Overtemperature
- 50,000Hour Life @ tc=90°C
- 5 Year Warranty
- Flicker free
- Safety according to UL8750 &UL 1310
- Suitable for Dry , Damp & Wet Locations

Application



LED Strip Light



Flicker free



IP 67
IP Rating



Short Circuit
Protection



Overload
Protection



Overcurrent
Protection

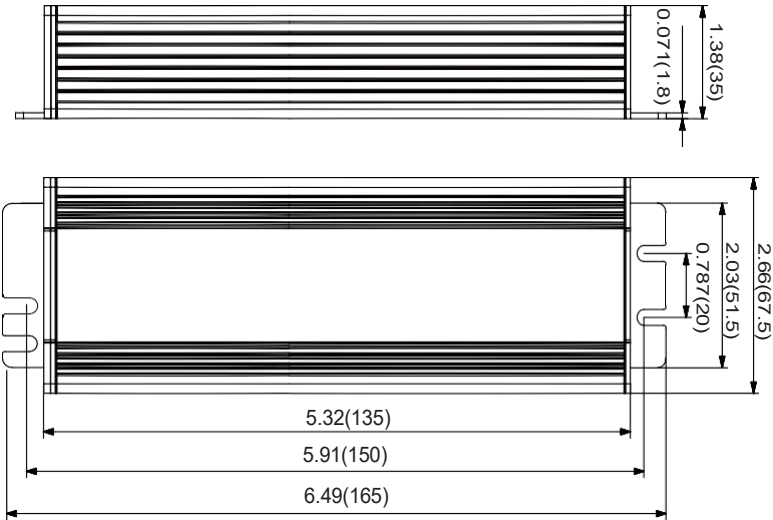


Temperature
Protection

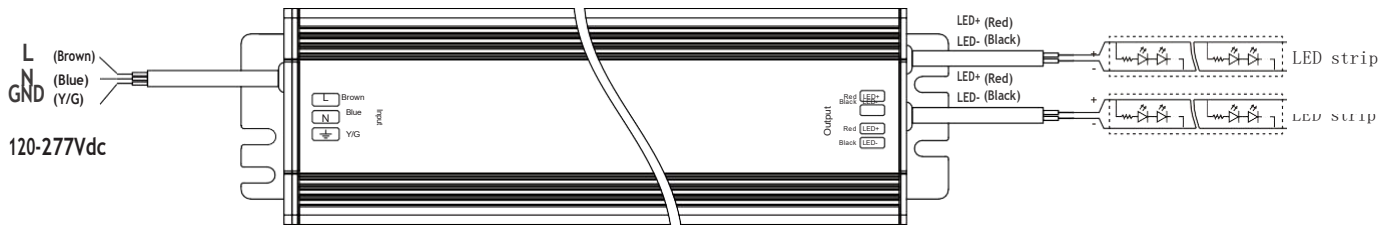
Technical Parameters

Model	OWP120-2W12V-T	
Input	Efficiency	≥88%@120VAC, ≥90%@230VAC, ≥90%@277VAC, full load
	Voltage	120VAC-277VAC
	Input voltage range	100VAC-305VAC
	Frequency Range(Hz)	50/60Hz
	AC Current(max)	1.2A@120VAC, 0.62A@230VAC, 0.53A@277VAC
	PF	≥0.95@120VAC, ≥0.95@230VAC, ≥0.95@277VAC, full load
	THD	<10%@120VAC, <10%@230VAC, <15%@277VAC, full load
	Inrush Current(max)	Cold start, 30.7A@120VAC 276us, 82.2A@277VAC 284us
	No-load power	<0.5W@120VAC
	Turn on Time	<0.75s, @230Vac (When the light begins to shine)
Output	Current	5A*2 Channel
	Voltage	12VDC
	Voltage Range	12VDC±3%
	Power	60W per channel, total 120W
	Channel	2
	Line Regulation	±1% @full load
	Load Regulation	±3% @full load
	PstLM	≤1
Protection	SVM	≤0.4
	Short Circuit	No output, Auto-recovery after Fault Clearance
	Overload	No output, Auto-recovery after Fault Clearance
	Overcurrent	No output, Auto-recovery after Fault Clearance
Safety&EMC	Overtemperature	Reduce power 50%, auto-restart after normal temperature
	Surge	L-N: 6kV, L-PE: 6kV, N-PE: 6kV, L&N-PE: 6kV
	Withstand Voltage	I/P-O/P: 3000Vac/1min/<5mA I/P-PE:1500Vac/1min/<5mA O/P-PE:500Vac/1min/<5mA
	Safety standards	UL8750,EN61347-1,EN61347-2-13
Others	EMI	EN55015, FCC Part 15 Class B @ 120-277V
	Working Temp.	-40°C~+60°C (-40°F-140°F)
	Storage Temp., Humidity	-40°C-85°C (-40°F-185°F), 20-90%RH
	tc	90°C (194°F) for safety & life
	Material	Metal
	IP Rating	IP67
	Lifetime	50,000h@tc:90°C (194°F)
	Warranty Condition	5 years
	Switch Cycle	25,000 times
	Dimension	165*67.5*35mm(L*W*H) 6.49*2.66*1.38 In
Packing(weight)	Net weight: 676g(1.49 lb)±5%/PCS; 20 PCS/ Carton;13.52kg(29.8lb)±5%/Carton; Carton Size: 368x220x210mm(14.49x8.66x8.26lb)(L*W*H)	

Dimension Inch (mm)



Wiring

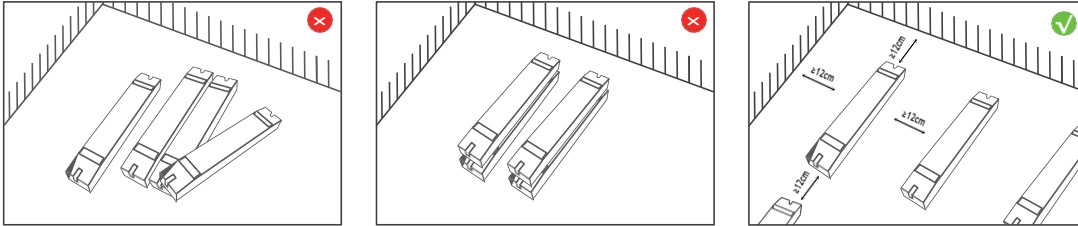


Max. quantity of drivers per miniature circuit breaker

Specification item	Value	Value	Condition
Inrush current I_{peak}	30.7A (120V)	82.2A (277V)	Input Voltage 120V/277V
Inrush current T_{width}	276us (120V)	284us (277V)	Input Voltage 120V/277V, measured at 50% I_{peak}

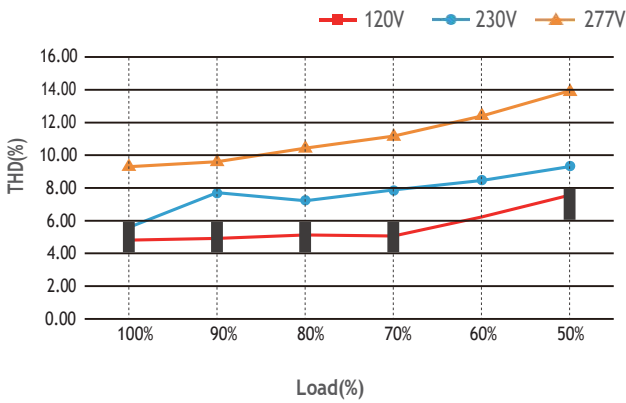
MCB	Input Voltage 120V Drivers	Input Voltage 277V Drivers	MCB	Input Voltage 120V Drivers	Input Voltage 277V Drivers
B10	8pcs	3pcs	C10	8pcs	5pcs
B13	10pcs	4pcs	C13	10pcs	7pcs
B16	13pcs	5pcs	C16	13pcs	9pcs
B20	16pcs	6pcs	C20	16pcs	11pcs
			D16	13pcs	18pcs

Installation Precautions

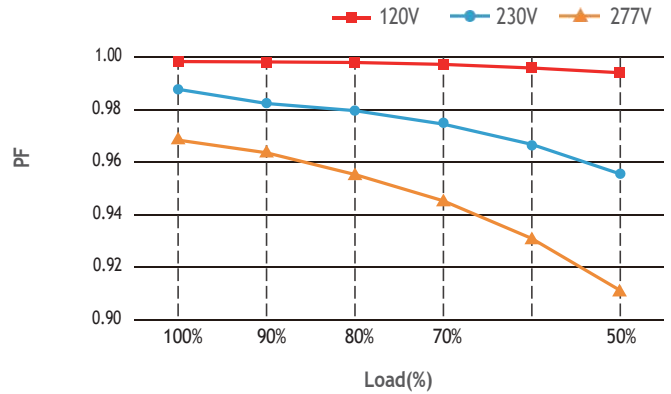


Please do not stack the products. The distance between two products should be >12cm so as not to affect heat dissipation and the lifespan of the products.

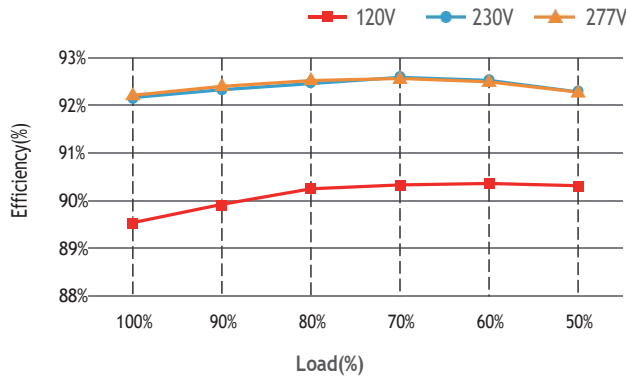
THD vs Load



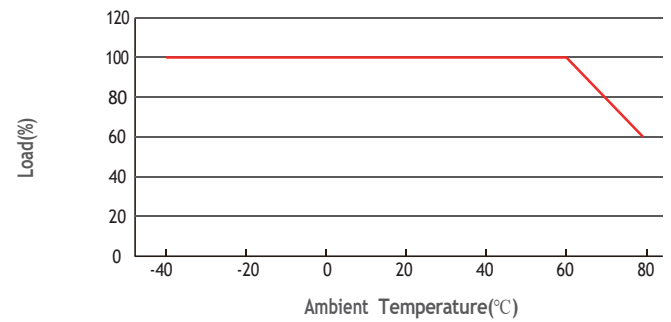
PF vs Load



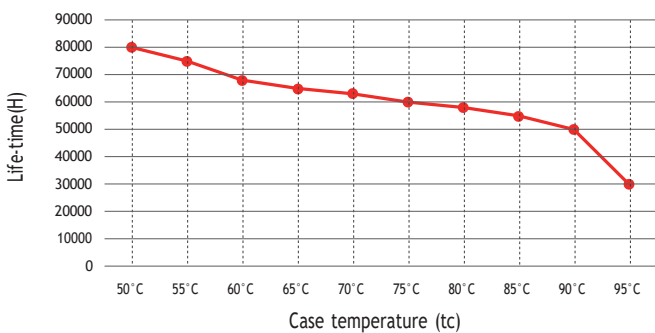
Efficiency vs Load



Derating Curve



Life-time vs. case temperature



The lifetime of the LED driver is shown in the figure above (calculated based on 90% reliability).

The relationship between t_c and t_a also depends on the luminaire design

Cautions

This product must be installed and adjusted by a qualified professional.		
1	Confirmation of installation conditions	<ul style="list-style-type: none"> · Waterproof and Protection: Install in a suitable location according to the waterproof and protection requirements of the power supply. Products without waterproof function should be protected from direct sunlight and rain. When installing outdoors, please use a waterproof box for protection. · Heat dissipation requirements: The drive power supply should avoid exposure to high temperature environments. Please ensure that the working environment temperature is within the recommended range. To ensure proper heat dissipation of the drive power supply, a well ventilated area should be selected for installation. Good heat dissipation conditions can help extend product lifespan.
2	Power check	<ul style="list-style-type: none"> · Before use, check the product parameters and confirm that the output voltage and current of the LED power supply meet the requirements
3	Safe wiring	<ul style="list-style-type: none"> · Use cables that meet the specifications to ensure that the cross-section of the wire matches the requirements of the driving power supply. Solid cables typically measuring 0.75-2.5 mm², (Please refer to the silk screen printing or wiring diagram in the instruction manual for specific wire diameter requirements). · If the power supply (metal casing) is installed on a grounded lighting component or equipment, the power supply needs to be grounded.
4	Wiring confirmation	<ul style="list-style-type: none"> · Before power on debugging, ensure that the wiring is secure and avoid poor contact to prevent unstable current or equipment damage.
5	Repair suggestions	<ul style="list-style-type: none"> · If the product malfunctions, please do not repair it without authorization. If you have any questions, please contact the supplier or sales team for assistance.

※ The contents of this manual are updated without prior notice. If the function of the product you are using is inconsistent with the instructions, the function of the product shall prevail. Please contact us if you have any questions .

Warranty Agreement

1. Warranty periods from the date of delivery : 5 years.
2. Free repair or replacement services for quality problems are provided within warranty periods.

Warranty exclusions below:

The following situations are not covered by the free warranty or replacement service:

1. Exceeding the warranty period.
2. Damage caused by human factors such as high voltage, overload, and improper operation.
3. The appearance of the product is severely damaged or deformed.
4. Normal wear and tear or aging during regular product use.
5. Damage caused by natural disasters or force majeure factors.
6. The quality inspection label of the product is damaged (QC PASS).
7. No contract or valid invoice proof signed with EUCHIPS has been provided.

※ Remedies: Repair or replacement is the only remedy provided by EUCHIPS to the customer, and EUCHIPS shall not be liable for incidental damages arising from repair or replacement, unless within the scope of applicable law.

※ Adjustment of Warranty Terms: EUCHIPS reserves the right to modify or adjust the warranty terms, which shall be published in writing.

Revision history

Change date	Version	Item	From	To
2026.05.10	V1.0	First release		