

OWP320D-2W24V

Summary

OWP320D-2W24V is a dimming driver that provides constant voltage output and complies with the DALI standard IEC62386

Product Feature

- Dual-channel constant voltage DC 24V output
- Wide voltage input range: 120VAC-277VAC
- waterproof rating of IP67, with an efficiency of up to 89%
- Dimming Smooth, Flicker free
- Suitable for LED constant voltage lighting fixtures, such as LED modules, strip lights, light bars, etcon

Application



LED Strip Light



Flicker free

IP67



Tunable White (DT8)

CE



IP 67 IP Rating



Short Circuit Protection



Overload Protection



Overcurrent Protection



RoHS
SELV

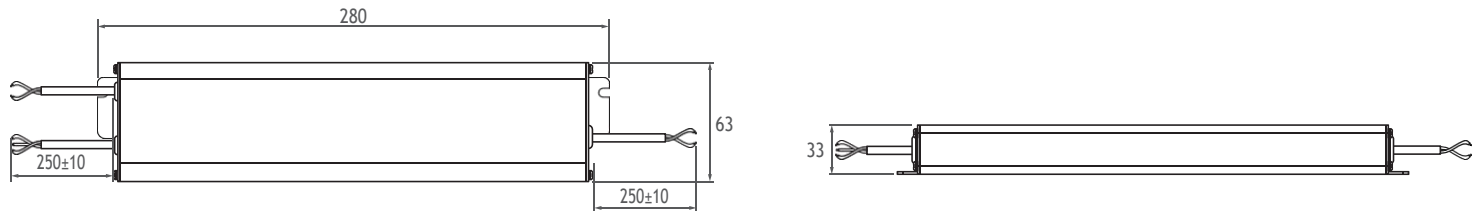
Technical Parameters

Model	OWP320D-2W24V	
Input	Efficiency	≥89%@120VAC, full load
	Voltage	120VAC-277VAC
	Frequency Range(Hz)	50/60Hz
	Current	3.0A@120VAC, 1.5A@230VAC, 1.3A@277VAC
	PF	≥0.95@120VAC, ≥0.95@277VAC, full load
	THD	<10%@120VAC, <10%@277VAC, full load
	Inrush Current(max)	Cold start, 53.6A@120VAC 204us
	Standby power	<1.0W@120VAC
	No load power	<1.0W@120VAC
	Start-up time	<0.75s, @120Vac (time-to-first-light)
Output	Current	13.33A
	Voltage	24VDC
	Voltage Accuracy	±5%
	Power	320W
	Channel	2
	Ripple	±3%mv
Function	Dimming Types	DALI2.0 (DT8)
	Dimming Range	1%-100%
	Dimming Curve	Logarithm
	Flicker	Flicker free
	Color temperature range	2700K-6500K
	Push DIM (Touch DIM)	Support
Function	Short Circuit	Shut down output, Auto-recovery after Fault Clearance
	Overload	Hiccup Protection, Auto-recovery after Fault Clearance
	Overcurrent	Hiccup Protection, Auto-recovery after Fault Clearance
Safety&EMC	Surge	L-N: 6kVAC L-N-PG: 10kVAC
	Withstand Voltage	I/P-O/P: 3000V/1min/<5mA I/P-PG:1500V/1min/<5mA O/P-PG:500V/1min/<5mA I/P-DIM(Signal port):1500V/1min/<5mA
	Safety standards	UL8750, UL1310, CSA-C22.2 No. 250.13
	EMC	FCC 47 Part 15 Class B
	Insulation Resisance	5MΩ
Others	Working Temp.	-20℃~+50℃ (-4°F-122°F)
	Storage Temp., Humidity	-40℃~85℃ (-40°F-185°F), 20-95%RH
	TC	90℃ (194°F) for safety & 85℃ (185°F) for life
	Material	Metal
	IP Rating	IP67
	Lifetime	50,000h@tc:85℃ (185°F)
	Warranty Condition	5years
	Switch Cycle	25,000 times
	Packing(weight)	Net weight: 1124g (2.47 lb)±5%/PCS; 10PCS/Carton;11.24kg(24.7 lb)±5%/Carton; Carton Size: 323*209*208mm(12.7*8.23*8.19 Inch)(L*W*H)
	Dimension	280*63*33mm (11.02*2.48*1.30 Inch)(L*W*H)

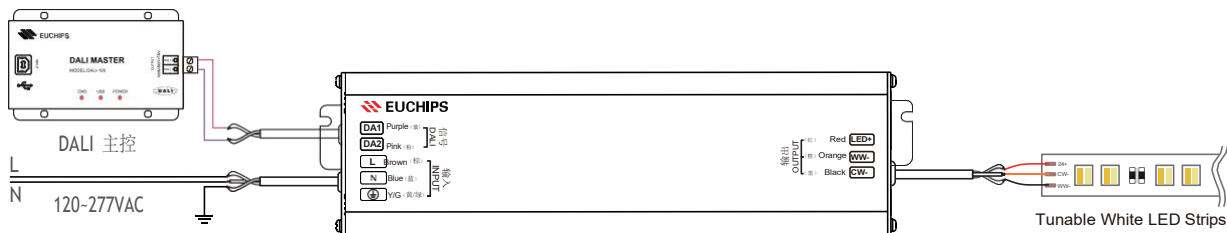
DALI

Parameter	Min.	Typ.	Max.
DALI Interface Standard	IEC62386-101, 102, 207, 209		
Dimming Range	1%	Logarithmic (default)	100%
DA1,DA2 Current	0		2mA

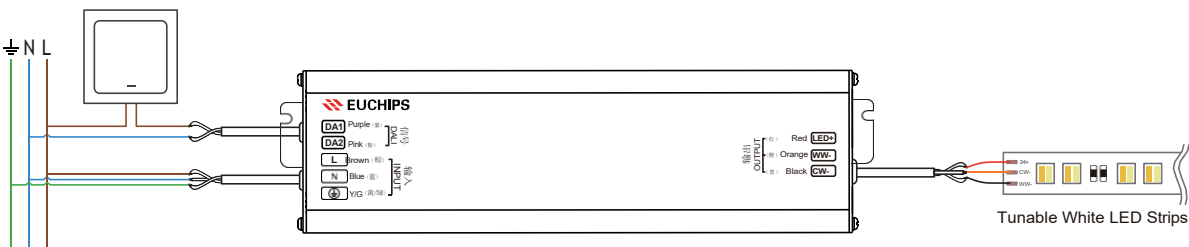
Dimension(mm)



Wiring Diagram



Push DIM(Touch DIM) Diagram



Push DIM(Touch DIM) Function

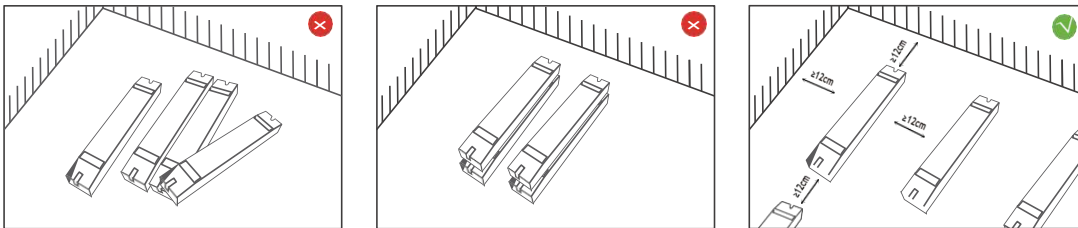
- 1) Press and hold Touch DIM for at least 8 seconds to switch to Touch DIM mode.
- 2) Short press the Touch DIM switch (<0.5 seconds) to control the brightness of the light.
- 3) Press and hold the Touch DIM switch (>0.5 seconds) to adjust the brightness of the light fixture. The brightness changes with each press of the switch.
- 4) Double click the Touch DIM switch (<0.3 seconds), and all connected lights will reach their brightest state.
- 5) Click three times (<0.3 seconds) to enter the color temperature adjustment mode of the lamp. Long press to adjust the color temperature, and short press to exit the color temperature adjustment mode.
- 6) The brightness adjustment range is 1% -100%.
- 7) Equipped with power-off memory function, it will restore to the previous power-off state when powered on again.ame circuit)

Max. quantity of drivers per miniature circuit breaker

Specification item	Value	Condition
Inrush current I_{peak}	53.6A	Input Voltage 120V
Inrush current T_{width}	204us	Input Voltage 120V measured to 50% I_{peak}

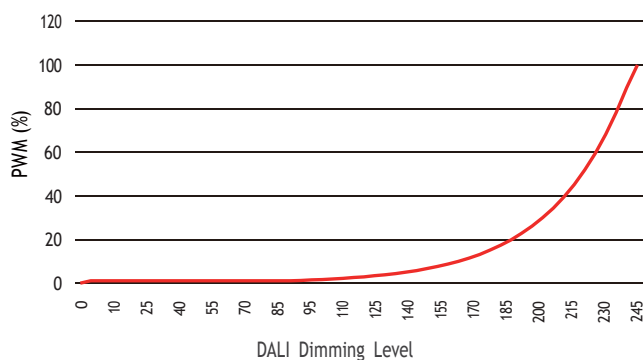
MCB	Input Voltage 120V Drivers	MCB	Input Voltage 120V Drivers
B10	3pcs	C10	3pcs
B13	4pcs	C13	4pcs
B16	5pcs	C16	5pcs
B20	6pcs	C20	6pcs
		D16	5pcs

Installation Precautions

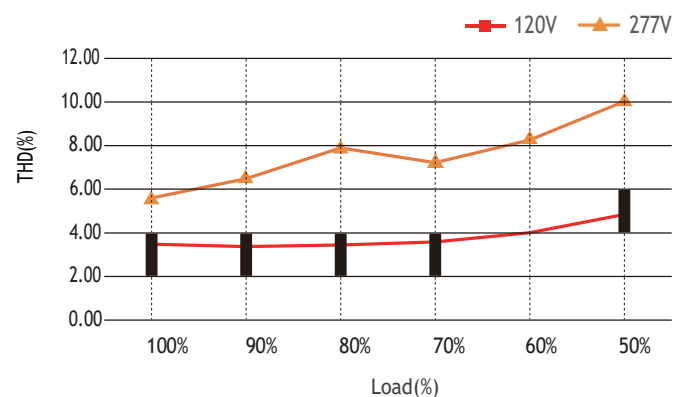


Please do not stack the products. The distance between two products should be $>12\text{cm}$ so as not to affect heat dissipation and the lifespan of the products.

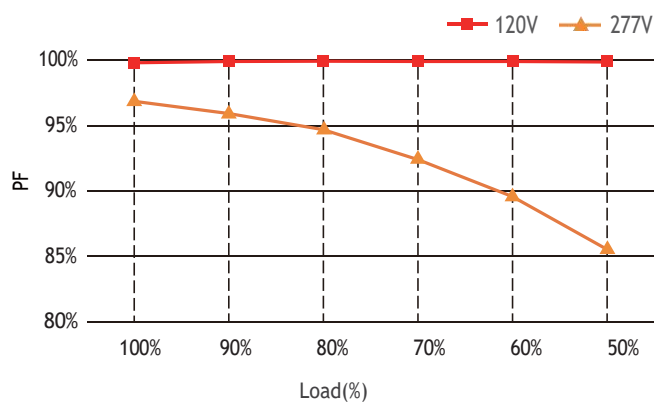
Dimming Curve



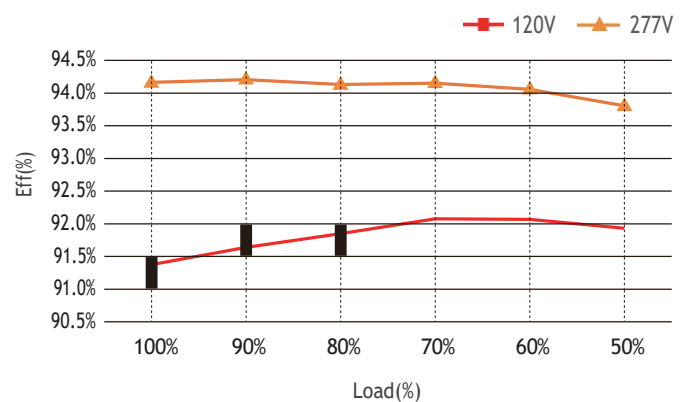
THD vs Load



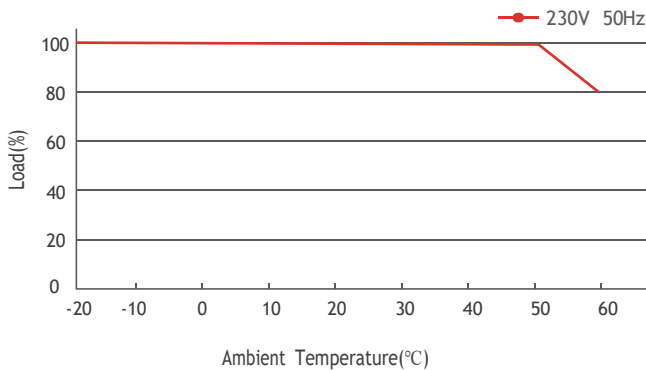
PF vs Load



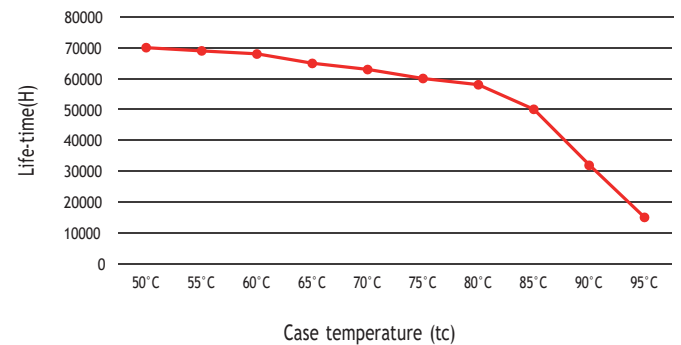
Efficiency vs Load%



Derating Curve



Life-time vs. case temperature



The life-time of the led driver is shown in the figure above
(calculated based on the 90% survival rate).

The relation of tc to ta temperature depends also on the luminaire design.

Cautions

This product must be installed and adjusted by a qualified professional.		
1	Confirmation of installation conditions	· 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	· 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	· 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	· Before power on debugging, ensure that the wiring is secure and avoid poor contact to prevent unstable current or equipment damage.
5	Repair suggestions	· 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.