

EULP50AT-1WPC-WS

Summary

EULP50AT-1WPC-WS is a constant current mode output LED driver. The driver supports leading edge (Triac) and trailing edge (ELV) dimmer, 0-10V to achieve a smooth dimming effect.

Product Features

- Single channel output, output current can be selected by software
- Compatible with TRIAC (forward-phase or leading-edge), ELV (reverse-phase or trailing-edge) and 0-10 V dimmers
- TRIAC and ELV dimming at 120 Vac only
- Class 2 power supply
- Protections: Over load, Over Voltage and short-circuit
- Suitable for indoor LED lighting application

Application



Down Light



Flicker free



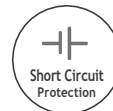
0-10V



TRIAC/ELV



Programming Current



Short Circuit Protection



Over Load Protection



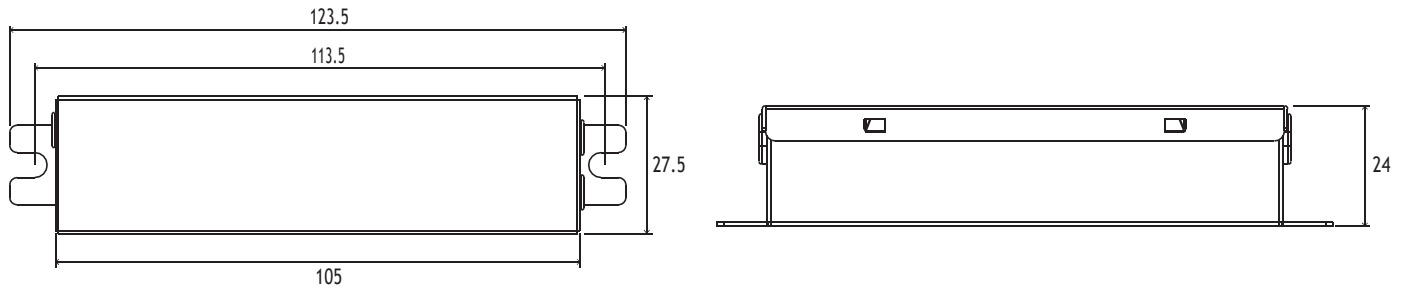
Over Voltage Protection



Technical Parameters

Model	EULP50AT-1WPC-WS	
Input	Efficiency	>87%@120VAC, >87%@277VAC Full load
	Frequency	50-60Hz
	Voltage	120VAC-277VAC
	PF	0.98@120VAC, 0.9@277VAC, Full load
	THD(full load)	10%@120VAC, 15%@277VAC, Full load
	Current	0.51Amax@120VAC, 0.25A@277VAC
	Inrush Current	Cold start, 20@120VAC 100us, 40A@277VAC 100us
	No load power	<2W
	Standby Power	<2W
Output	Current	700-1200mA
	Voltage	9-50V *(Triac dimming above 20V has better dimming effect)
	Power	50W max *(Triac dimming with a load of 20W or more has better dimming effect)
	Channel	1
	No load output voltage	59V Max
	Current Accuracy	±5% (*700mA ±7%)
	LF current ripple(<120Hz)	<3%
	Protection	Over Voltage
Over load		Reduce current protection, restore normal operation after troubleshooting
Short circuit		No output, self recovery after removing the fault
Safety & EMC	Surge	L-N:2.5KV (ANSI/IEEE C62.41.1-2002 & c62.41.2-2002 category A, 2.5 kV ringwave)
	Withstand Voltage	I/P-O/P: 2000Vac/1min/<5mA, I/P-PG:1500Vac/1min/<5mA, O/P-PG: 500Vac/1min/<5mA, O/P-DIM(Signal port):500Vac/1min/<5mA
	Safety standards	UL8750/UL1310/CSA25013,CSA class P
	EMI Eission	EN55015,EN61000-3-2 Class C,IEC61000-3-3
	EMC Immunity	FCC class B(120V)/class A(277V)
Function	Dimming type	0-10V, TRIAC/ELV(@120VAC 60Hz)
	Dimming range	1%-100%
	Dimming curve	0-10V: (Linearity) TRIAC/ELV: (Linearity)
	Flicker	Flicker free
Others	Working temp.	(-20-+50) °C [-4°F-122°F]
	Relative humidity	20-90% RH
	tc	_____ °C
	Lifetime	50,000h@tc:85 [185°F]
	Warranty Condition	5 years
	Switch cycle	>25,000 times
	IP rating	IP20
	Material	Metal
	Dimension	123.5*27.5*24mm (4.86*1.08*0.94 Inch)(L*W*H)
Pack Information	N.W: 150g(0.33 lb)±5%/PCS; 75 PCS/ Carton; 11.75kg(25.90lb)±5%/Carton; Carton Size: 398*230*170 mm(15.67*9.05*6.69 Inch)(L*W*H)	

Dimension(mm)



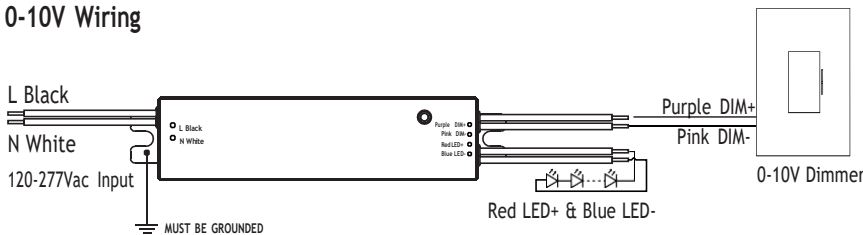
Wiring Diagram

Metal case
 All material to be ROHs compliant to Directive 2002/95/EC
 Wires to be Stranded with UL approval
 Input: Black & White: 200mm , 18AWG
 Output: Red & Blue: 200mm , 18AWG
 Dimming: Purple & Pink:200mm , 20AWG

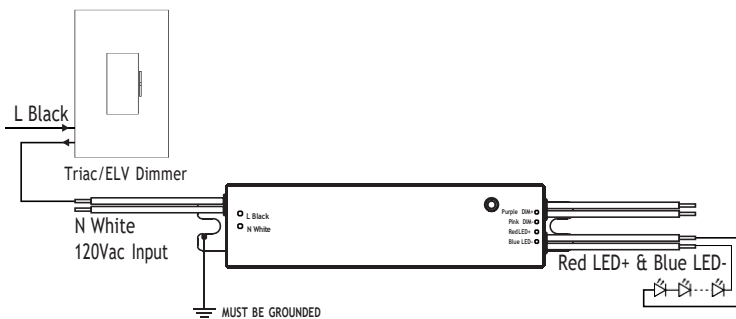
Mode switching

0-10V, thyristor dimming mode switch, switch to 0-10V dimming mode: 0-10V dimming voltage $\leq 5V$ time about 5S.
 Switch to thyristor dimming mode: Turn the thyristor knob to the middle position for 5S.
 After changing the dimming mode, keep changing the dimming mode and repeat previous steps

0-10V Wiring



Triac/ELV Wiring

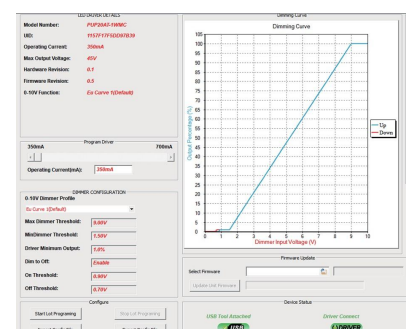


Configurable functions

- Data log reading: SKU, serial number, batch number, FW revision version
- Output current regulation (factory default: 950)
- Dimming depth editing (factory default: see technical parameter table, editable range 10% Max)
- Dimming curve editing. Built in linear and logarithmic fixed curves, can be directly selected for use. At the same time, it has built-in custom curves and supports editing curves.
- Support parameter copying/replication and batch editing.



EU-PROG Programming connector



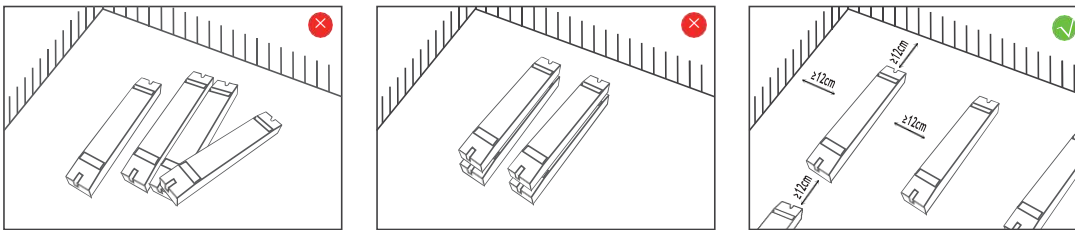
Interface

Max. quantity of drivers per miniature circuit breaker

Specification item	Value	Value	Condition
Inrush current I_{peak}	20A (120V)	40A (277V)	Input Voltage 120V/277V
Inrush current T_{width}	100us (120V)	100us (277V)	Input Voltage 120V/277V, measured ta 50% I_{peak}

MCB	Input Voltage 120V Drivers	Input Voltage 277V Drivers	MCB	Input Voltage 120V Drivers	Input Voltage 277V Drivers
B10	19pcs	21pcs	C10	19pcs	35pcs
B13	25pcs	27pcs	C13	25pcs	46pcs
B16	31pcs	34pcs	C16	31pcs	57pcs
B20	39pcs	42pcs	C20	39pcs	71pcs
			D16	31pcs	64pcs

Installation Precautions



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

Cautions

1. This product should be installed by qualified personnel.
2. This product is non waterproof, need to avoid sun and rain. In case of outdoor use, please ensure it is mounted in a water proof enclosure.
3. Good heat dissipation conditions extend product life. Please install the product in a well-ventilated environment.
4. Please make sure LED power supply output voltage, current is used to meet the product requirements.
5. Please ensure that adequate sized cable is used from the controller to the LED lights to carry the current. Please also ensure that the cable is secured tightly in the connector.
6. Due to safety concerns, PVC or rubber cord of 0.75- 2.5mm² is recommended for input and output terminal(s) (excluding signal terminals). Flat power cord is not suitable. Ensure all wire connections and polarities are correct before applying power to avoid any damages to the LED lights.
7. In case of malfunction, do not repair it yourself.

※ 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:

1. Beyond warranty periods.
2. Any artificial damage caused by high voltage, overload, or improper operations
3. Products with severe physical damage.
4. Damage caused by natural disasters and force majeure.
5. Warranty labels and barcodes have been damaged.
6. No any contract signed by EUCHIPS.

- Repair or replacement provided is the only remedy for customers. EUCHIPS is not liable for any incidental or consequential damage unless it is within the law.
- EUCHIPS has the right to amend or adjust the terms of this warranty, and release in written form shall prevail.