

EULP30AT-1WPC-WS

Product Features

- Single channel output, output current can be Programmable by software
- Support 0/1-10V ,Potentiometer,PWM,Triac/ELV Dimming
- TRIAC and ELV dimming at 120 Vac only
- Protections: Overload, Overvoltage and short-circuit
- UL Class P, Class 2 Output
- Safety according to UL8750 & UL 1310
- Suitable for Dry , Damp Locations
- Suitable for indoor LED lighting application

Application



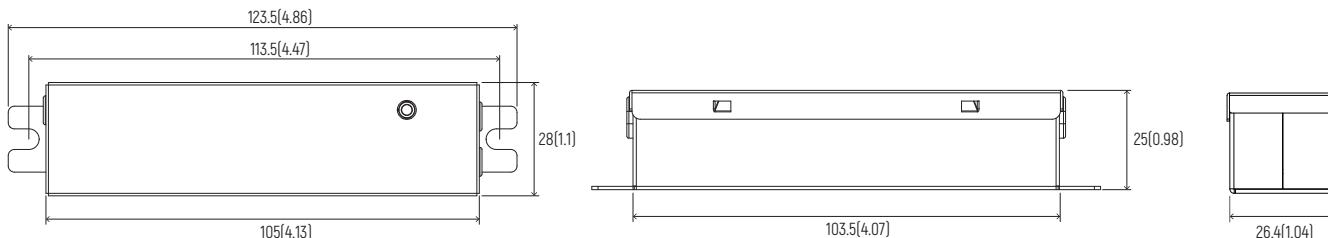
Down Light



Technical Paramaters

Model	EULP30AT-1WPC-WS	
Input	Efficiency	≥85%@120VAC, ≥84%@277VAC, Full load
	Frequency	50-60Hz
	Voltage	120VAC-277VAC
	PF	≥0.95@120VAC, ≥0.9@277VAC, Full load
	THD[full load]	≤10%@120VAC, ≤15%@277VAC, Full load
	Current	0.32Amax@120VAC, 0.15A@277VAC
	Inrush Current	Cold start, 10A@120VAC 100us, 21A@277VAC 100us
	Standby Power	≤2W
	No load power	≤2W, ≤2.2W@277VAC
Output	Current	350-800mA (Default current: 550mA)
	Voltage	9-50V *(Triac dimming above 20V has better dimming effect)
	Power	30W max *(Triac dimming with a load of 7W or more has better dimming effect)
	Channel	1
	No load output voltage	59V Max
	Current Accuracy	±5% [*350mA ±7%]
	LF current ripple(<120Hz)	<3%
Protection	Overvoltage	Yes, Current drops, Auto-recovery after Fault Clearance
	Overload	Yes, Current drops, Auto-recovery after Fault Clearance
	Short circuit	Shut down output, Auto-recovery after Fault Clearance
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 Emission	EN55015,EN61000-3-2 Class C,IEC61000-3-3
	EMC Immunity	FCC class B(120V)/class A(277V)
Function	Dimming type	0/1-10V ,Potentiometer,PWM,Triac/ELV[@120VAC 60Hz]
	Dimming range	1%-100%
	Dimming curve	0-10V: Linearity/Logarithm curve programmable, Triac/ELV: Linearity
	Flicker	Flicker free
Others	Working temp.	[-20~+50] °C [-4°F~122°F]
	Relative humidity	20-90% RH
	tc	80°C [176°F]
	Lifetime	50,000h@tc:80°C[176°F]
	Warranty Condition	5 years
	Switch cycle	>25,000 times
	IP rating	IP20
	Material	Metal
	Dimension	123.5*28*25mm [4.86*1.1*0.98 Inch][L*W*H]
	Pack Information	N.W: 150g(0.33 lb)±5%/PCS; 75 PCS/Cartron; 11.75kg(25.9 lb)±5%/Cartron; Carton Size: 405x197x174mm[15.94*7.76*6.85 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

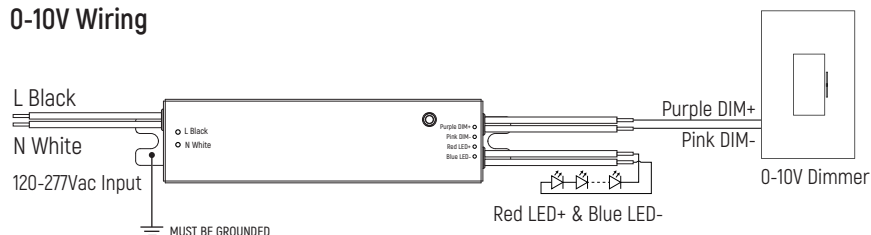
Dimming: Purple & Pink:200mm , 20AWG

Mode switching

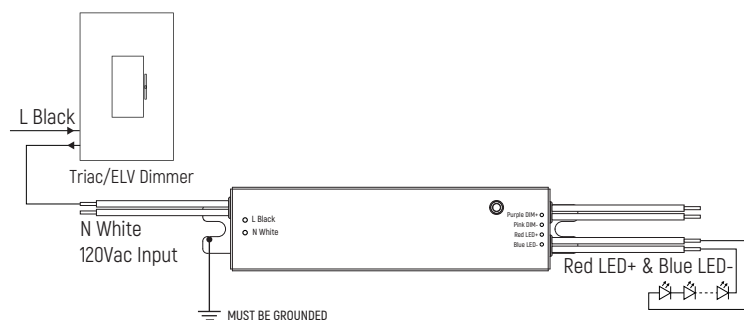
1. Dimming Mode Switching Window: Operation is only allowed within 30 seconds after power-on, and the device must remain powered off for at least 5 seconds before re-powering.
2. Activation Condition: The target action must be continuously maintained for 5 seconds to take effect.
3. Device Limitation: Only one dimming mode can be used at a time (e.g., if 0-10V mode is selected, a TRIAC dimming knob cannot be connected simultaneously. If TRIAC mode is selected, the 0-10V signal must remain disconnected and insulated).
4. Mode Persistence: Once a dimming mode is activated, it remains in effect until the next mode switch.

Dimming Mode Operation Steps Reference Table		
Target mode	Action requirements	Effective verification
0-10V mode	Control voltage $\leq 5V$ (hold for 5 seconds)	0-10V Mode: Normal Dimming
TRIAC/ELV Mode	Adjust the knob to 80%-50% brightness (hold for 5 seconds)	Triac/ELV Mode: Normal Dimming

0-10V Wiring



Triac/ELV Wiring



Compatible Dimmer Recommendations

Mfg.	Lutron	Lutron	Lutron	Lutron	Lutron	Lutron
Model	SCL-153P-WH	DVCL-153PR-WH	DVCL-153P	CTCL-150H-LA	CTCL-153-PDH-WH	DVCL-153PH-WH
Mfg.	Lutron	GE				
Model	MACL-153MR-WH	GE-Dimmable LED&CFL-bULBS				

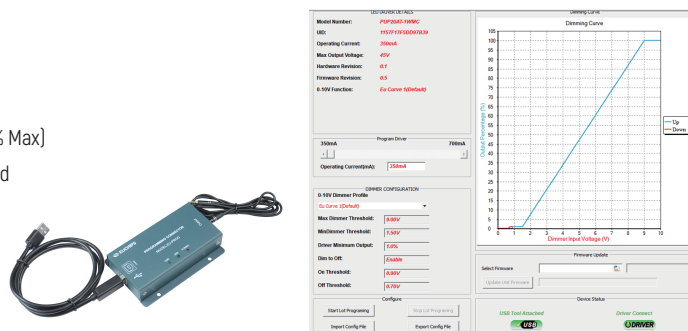
Note: The dimmers listed above have been tested and verified. Triac dimmers are not included in this recommendation list and need to be used after actual testing.

Configurable functions

- Data log reading: SKU, serial number, batch number, FW revision version
- Output current regulation (factory default: 550)
- 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 User Manual, Please click the link to view.

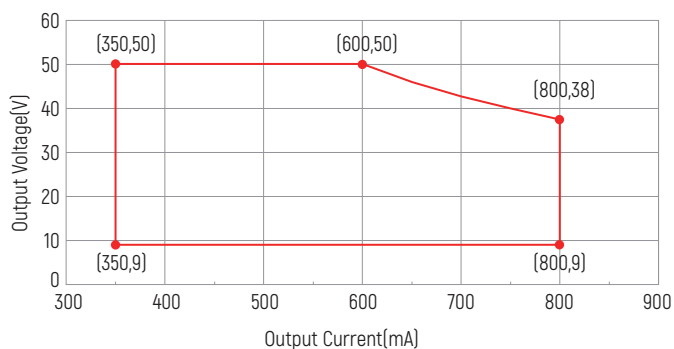
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EU-PROG Programming connector

Interface

Work Window



*(Triac dimming above 20V has better dimming effect)

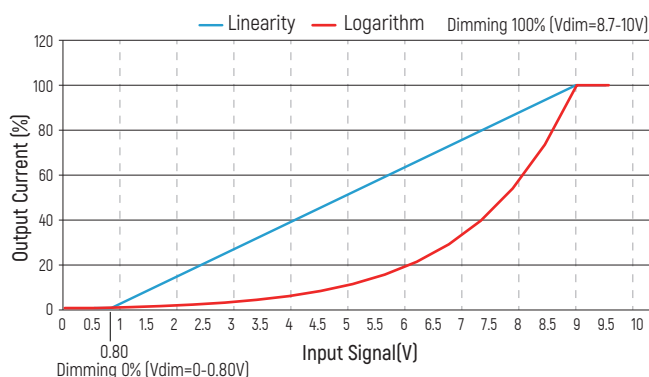
Adjustable output current

The current can be adjusted through a programmer, with a range of 350-800mA and a minimum adjustment current of 1mA. Example: 350mA/351mA/352mA--800mA.

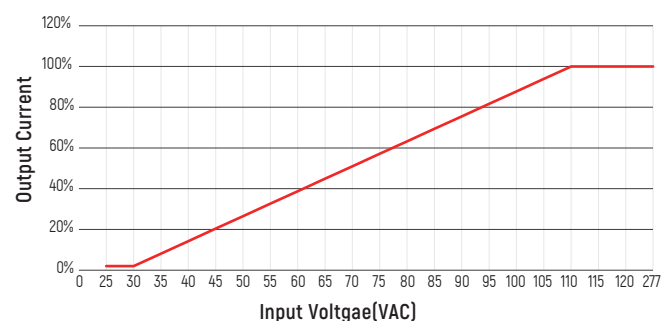
The table provides examples of partial currents:

Output Current	350mA	400mA	500mA	600mA	700mA	750mA	800mA
Output Voltage	9-50VDC	9-50VDC	9-50VDC	9-50VDC	9-43VDC	9-40VDC	38VDC
Output Power	18W	20W	25W	30W	30W	30W	30W

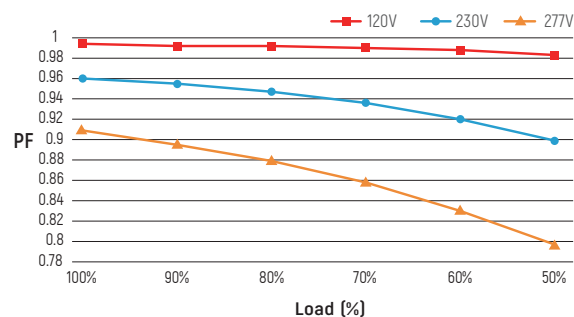
0-10V Dimming Curve



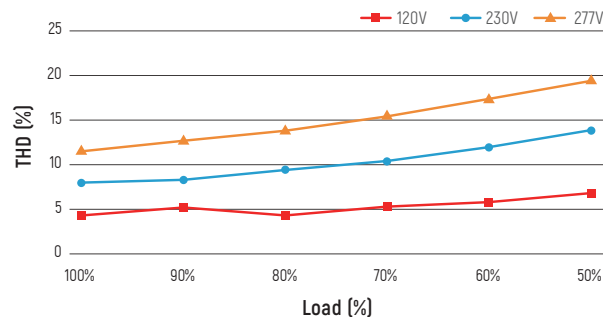
Triac Dimming Curve



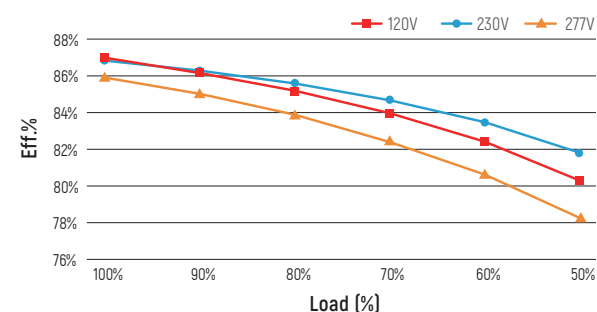
PF vs Load Curve



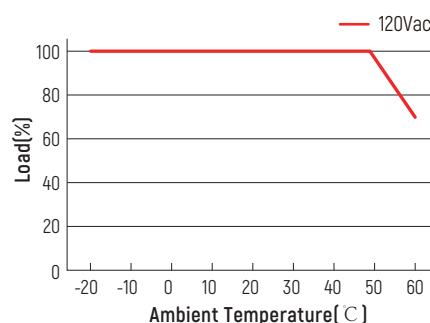
THD vs Load Curve



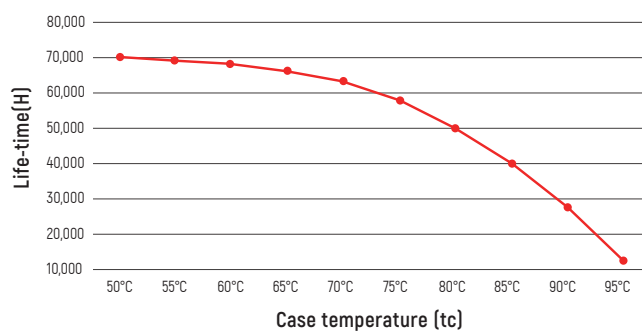
Efficiency vs Load Curve



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).

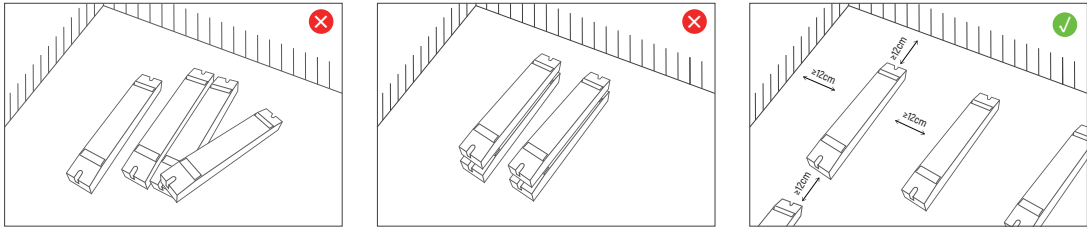
The relation of t_c to temperature depends also on the luminaire design.

Max. quantity of drivers per miniature circuit breaker

Specification item	Value	Value	Condition
Inrush current I_{peak}	10A (120V)	21A (277V)	Input Voltage 120V/277V
Inrush current T_{width}	100us (120V)	100us (277V)	Input Voltage 120V/277V, measured to 50% I_{peak}

MCB	Input Voltage 120V Drivers	Input Voltage 277V Drivers	MCB	Input Voltage 120V Drivers	Input Voltage 277V Drivers
B10	31pcs	40pcs	C10	31pcs	66pcs
B13	40pcs	53pcs	C13	40pcs	86pcs
B16	50pcs	65pcs	C16	50pcs	106pcs
B20	62pcs	81pcs	C20	62pcs	133pcs
			D16	50pcs	106pcs

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.

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.