

General

Product Type	Constant Current Driver
Length (mm)	175
Width (mm)	44
Height (mm)	30
Housing Color	White
Housing Material	Plastic
Mounting	Surface mounted
Weight (g)	160

Electronics

Input Domain	AC	
Input Voltage	220 ~ 240V AC	
Output Voltage	10 ~ 54V DC	
Output Current (mA) max/output	150~900	
Output Power Range (W)	1.5~25	
Power Supply	Internal	
LED Outputs	1	
Input Frequency	50 ~ 60Hz	
Inrush Current	2.28A @230VAC	

Lighting

Color Range	Single Color
Color Harige	Sirigle Color

Control

Output Signal	PWM-CC
Control	O-1OV
Dimming Range	O~100%
Number of Channels	1

Protection

Protection Class	II

Environmental

Storage Temperature	-40 ~ +80 °C
Operating Temperature	-20 ~ +50 °C
Ingress Protection	IP20

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Disclaimer

Due to the technical evolution and improvement of our products, the data provided in this document may be updated on a regular basis, and as such, confirmation of this information is strongly recommended prior to the order process. OneEightyOne is not responsible for any discrepancies in this document following changes in our products. We reserve the right to make technical changes to our products and to change information, at its sole discretion, without notice.



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1-10V

PWM RX Push DIM

5 in 1 dimming

LED Intelligent Driver

- Dimming interface: 0-10V (1-10V/PWM/RX), Push Dim.
- Built-in high performance MCU, dimming curve can be customized.
- PWM digital dimming, no alter LED color rendering index.
- Dimming range: 0~100%, LED start at 0.1% possible.
- Non-load output voltage 0V to prevent damages to LED caused by poor contact.
- Multi-current & wide voltage, suitable for different power LED.
- · Short circuit / Over-heat / Over load / Non-load protection.
- Class 2 power supply. Full protective plastic housing.
- Compliant with Safety Extra Low Voltage standard.
- Suitable for internal lights application for I/□/□.







BIS

СВ

CE



Certificate No. R-41072265

ENEC Certificate No. U6 17 07 01119 004

Certificate No. SG PSB-LE-00609



Equipment registration No: E2017013627 Ref: ESV170365

EMC Certificate No. BST1702498520001Y-1EC-1

LVD Certificate No. BST1709992470001Y-1SC-2 Certificate No. 2017011002993756



0-10V PUSH DIM













1.5~25W 150~900mA 10~54Vdc

Dimmable

0.1%-100%



Main Characteristics

Dimming Interface: 0-10V (1-10V/PWM/RX), Push Dim

Input Voltage Range: 220-240Vac ±10%

Frequency: 50/60Hz Input Current: 230Vac≤0.15A

Power Factor: PF>0.93/230Vac, at full load

THD: ≤20% at 230Vac, at full load

Efficiency: >84%

Inrush Current(typ.): Cold start 2.28A at 230Vac (twidth=36µs measured at 50% Ipeak)

Control Surge Capability: L-N: 1kV

Leakage Current: <0.5mA/230Vac

Operating Voltage: 10-54Vdc
Output Power Range: 1.5W~25W

 Output Current :
 150mA
 250mA
 300mA
 350mA
 500mA

 Output Voltage :
 10-54V
 10-54V
 10-54V
 10-54V
 10-50V

Output Power: 1.5W-8.1W | 2.5W-13.5W | 3W-16.2W | 3.5W-18.9W | 5W-25W

Current Accuracy: ±3%

Max Output Voltage: 58Vdc
Non-load Output Voltage: 0Vdc

PWM Frequency: ≤4KHz

Dimming Range: 0~100%, LED start at 0.1% possible.

Working Temperature: tc: 90°C ta: 50°C

Working Humidity: 20 ~ 95%RH, non-condensing

Storage Temp., Humidity: -40 \sim 80°C, 10~95%RH

Temp. Coefficient: $\pm 0.03\%/^{\circ}C(0-50^{\circ}C)$

Vibration: 10~500Hz, 2G 12min./1cycle, period

for 72min. each along X, Y, Z axes

600mA	700mA	900mA
10-42V	10-36V	10-28V
6W-25.2W	7W-25.2W	9W-25.2W

Protection

Over-heat Protection: Shut down the output when PCB temp. $\geq 110^{\circ}$ C,

auto recovers when temp. back to normal.

Over Load Protection: Shut down the output when rated power ≥ 102%

~125%, auto recovers when the load is reduced.

Short Circuit Protection: Shut down automatically if short circuit occurs,

auto recovers after faulty condition is removed.

Non-load Protection: Shut down the output if no load, auto recovers

when load back to normal.

Safety & EMC

Withstand Voltage: I/P-0/P: 3750Vac

Isolation Resistance: I/P-0/P: $100M\Omega/500VDC/25^{\circ}C/70\%RH$

Safety Standards: IEC/EN61347-1, IEC/EN61347-2-13

EMC Emission: EN55015, EN61000-3-2 Class C, IEC61000-3-3

EMC Immunity: EN61000-4-2,3,4,5,6,8,11 EN61547

Others

 $\begin{array}{ll} \mbox{Dimension:} & 167 \times 39 \times 30 \mbox{mm} (\mbox{L} \times \mbox{W} \times \mbox{H}) \\ \mbox{Packing:} & 168 \times 41 \times 32 \mbox{mm} (\mbox{L} \times \mbox{W} \times \mbox{H}) \end{array}$

Weight(G.W.): 160g±10g

Dimensions

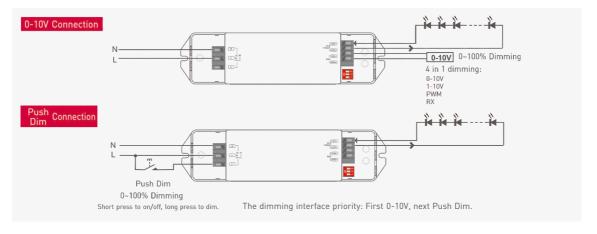




Connections







Push Dimming

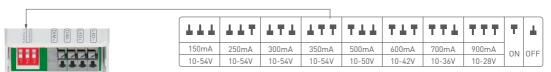


Reset Switch

- On/off control: Short press.
- · Stepless dimming: Long press.
- With every other long press, the light level goes to the opposite direction.
- Dimming memory: Brightness will be the same as previously adjusted when turning off and on again.

LED Current Selection

Quick options: DIP switch for 8 optional currents' quick selection(see the table below).

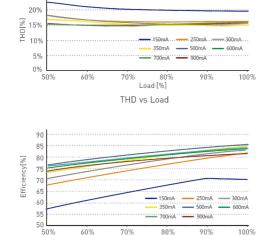


* After current setting by DIP switch, power off and then power on to make the new current effective.

🗱 E.g. LED 3.2V/pcs: 10-54V can power 3-16pcs LEDs in series, 10-28V can power 3-8pcs LEDs, the max quantity of LEDs in series will be subject to the actual voltage of LED.

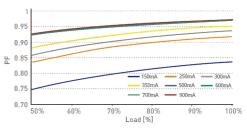
Relationship Diagrams

25%



Load [%]

Efficiency vs Load



Power Factor Characteristic

