



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)	200

Electronics

Input Domain	AC
Input Voltage	220 ~ 240V AC
Output Voltage	10 ~ 54V DC
Output Current (mA) max/output	100~700
Output Power Range (W)	1~15
Power Factor at Full Load	+0.90 @ 230VAC
Power Supply	Internal
LED Outputs	1
Input Frequency	50 ~ 60Hz
Inrush Current	2.48 A @230VAC

Lighting

Color Range	Single Color
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Control

Output Signal	PWM-CC
Control	0-10V
Dimming Range	0~100%
Number of Channels	1

Protection

Protection Class	II
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Environmental

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

CE IP20

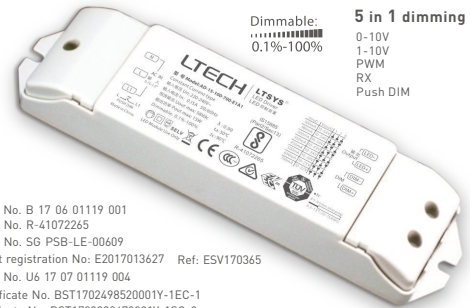
Disclaimer

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.

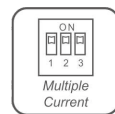
LED Intelligent Driver

1~15W 100~700mA 10~54Vdc

- 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 / II / III.



TUV Certificate No. B 17 06 01119 001
 BIS Certificate No. R-41072265
 CB Certificate No. SG PSB-LE-00609
 RCM Equipment registration No: E2017013627 Ref: ESV170365
 ENEC Certificate No. U6 17 07 01119 004
 CE EMC Certificate No. BST1702498520001Y-1EC-1
 LVD Certificate No. BST1709992470001Y-1SC-2
 CCC Certificate No. 2017011002993755



Main Characteristics

Dimming Interface: 0-10V (1-10V/PWM/RX), Push Dim
 Input Voltage Range: 220-240Vac $\pm 10\%$
 Frequency: 50/60Hz
 Input Current: 230Vac $\leq 0.15A$
 Power Factor: PF $> 0.9/230Vac$, at full load
 THD: $\leq 20\%$ at 230Vac, at full load
 Efficiency: $> 83\%$
 Inrush Current(typ.): Cold start 2.28A at 230Vac (twidth=36 μs measured at 50% Ipeak)
 Control Surge Capability: L-N: 1kV
 Leakage Current: $< 0.5mA/230Vac$
 Operating Voltage: 10-54Vdc

Output Power Range: 1W~15W
 Current Accuracy: $\pm 3\%$
 Max Output Voltage: 58Vdc
 Non-load Output Voltage: 0Vdc
 PWM Frequency: $\leq 4KHz$
 Dimming Range: 0~100%, LED start at 0.1% possible.
 Working Temperature: tc: 90°C ta: -30°C ~ 55°C
 Working Humidity: 20 ~ 95%RH, non-condensing
 Storage Temp., Humidity: -40 ~ 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

Output Current :	100mA	180mA	300mA	350mA	450mA	500mA	600mA	700mA
Output Voltage :	10-54V	10-54V	10-50V	10-43V	10-34V	10-30V	10-25V	10-22V
Output Power :	1W-5.4W	1.8W-9.72W	3W-15W	3.5W-15.05W	4.5W-15.3W	5W-15W	6W-15W	7W-15.4W

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 $\geq 102\%$ ~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

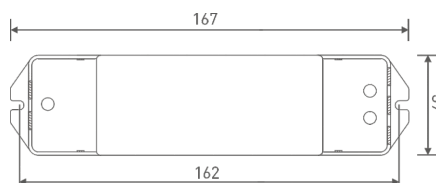
Withstand Voltage: I/P-O/P: 3750Vac
 Isolation Resistance: I/P-O/P: 100M Ω /500VDC/25°C/70%RH
 Safety Standards: IEC/EN61347-1, IEC/EN61347-2-13
 EMC Emission: EN55015, EN61000-3-2 Class C, IEC61000-3-3
 EMC Immunity: EN61000-4-2,3,4,5,6,8,11 EN61547

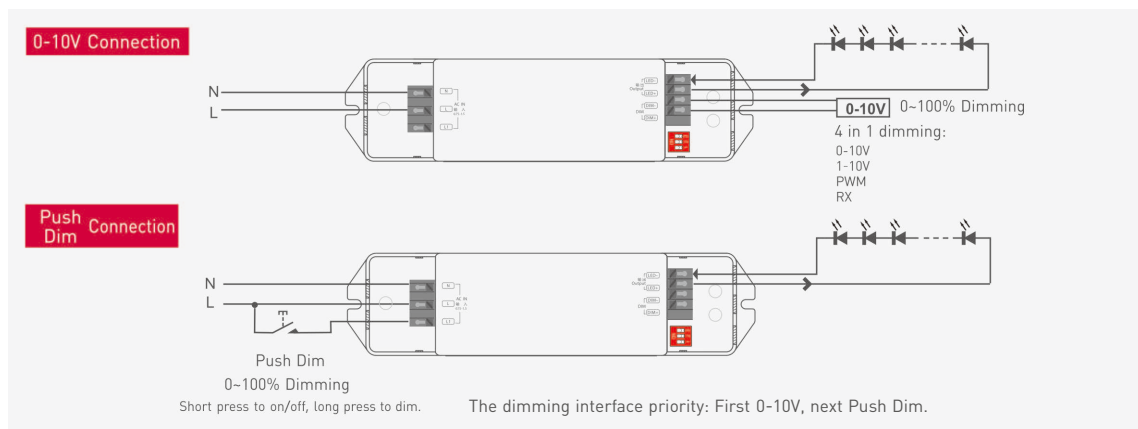
Others

Dimension: 167 $\times$ 39 $\times$ 30mm(L $\times$ W $\times$ H)
 Packing: 168 $\times$ 41 $\times$ 32mm(L $\times$ W $\times$ H)
 Weight(G.W.): 160g $\pm$ 10g

Dimensions

Unit: mm





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

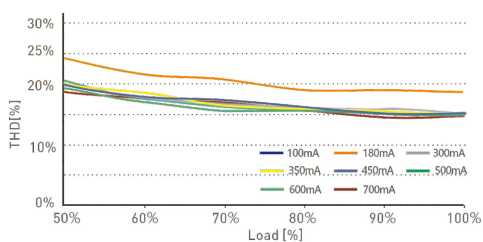
Quick options: DIP switch for 8 optional currents' quick selection[see the table below].

100mA	180mA	300mA	350mA	450mA	500mA	600mA	700mA	ON	OFF
10-54V	10-54V	10-50V	10-43V	10-34V	10-30V	10-25V	10-22V		

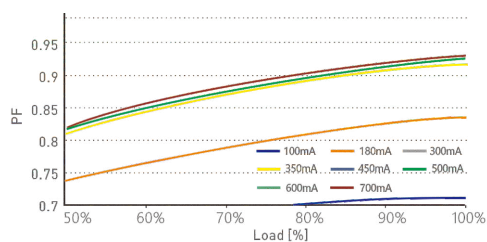
* After current setting by DIP switch, power off and then power on to make the new current effective.

* E.g. LED 3.2V/pcs: 10-54V can power 3-16pcs LEDs in series, 10-22V can power 3-6pcs LEDs, the max quantity of LEDs in series will be subject to the actual voltage of LED.

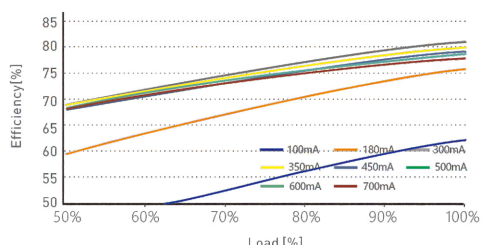
Relationship Diagrams



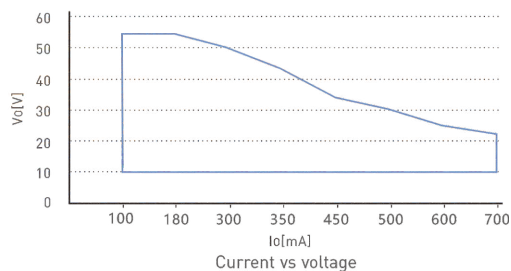
THD vs Load



Power Factor Characteristic



Efficiency vs Load



Current vs voltage