

LED Intelligent Driver

5W~50W 500~1750mA 10~54V

- 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.
- Multiple current, wide voltage, compatible with a variety of LED lights.
- Power factor > 0.99, Efficiency > 85%.
- Short circuit / Over-heat / Over load protection.
- Non-load output voltage 0V to prevent damages to LED caused by poor contact.
- Class 2 power supply. Full protective plastic housing.
- Compliant with Safety Extra Low Voltage standard.
- Suitable for indoor environments.



5 in 1 dimming

0-10V
1-10V
PWM
RX
Push DIM

Dimmable:
.....
0.1%-100%

SELV □ ▽ ▽ ▽ ▽ ▽ ▽ ▽ CE RoHS

0-10V
PUSH DIM

PWM
Digital Dimming

PF
>0.99

η >85%
Efficiency

Over-heat
Protection

Short Circuit
Protection

Over Load
Protection

ON
1 2 3
Multiple
Current

Main Characteristics

| | | | | | | | | |
|---------------------------|--|---------|---------|------------|----------|------------|----------|------------|
| Dimming Interface: | 0-10V (1-10V/PWM/RX), Push Dim | | | | | | | |
| Input Voltage Range: | 100-240Vac ±10% | | | | | | | |
| Frequency: | 50/60Hz | | | | | | | |
| Input Current: | 115Vac≤0.6A, 230Vac≤0.3A | | | | | | | |
| Power Factor: | PF>0.99/115Vac, PF>0.95/230Vac, at full load | | | | | | | |
| THD: | ≤10% at 115Vac, ≤20% at 230Vac, at full load | | | | | | | |
| Efficiency: | >85% | | | | | | | |
| Inrush Current(typ.): | Cold start 50A at 230Vac | | | | | | | |
| Control Surge Capability: | L-N: 1kV | | | | | | | |
| Leakage Current: | <0.5mA/230Vac | | | | | | | |
| Operating Voltage: | 10-54Vdc | | | | | | | |
| Output Power Range: | 5W~50W | | | | | | | |
| Output Current: | 500mA | 700mA | 900mA | 1050mA | 1200mA | 1450mA | 1600mA | 1750mA |
| Output Voltage: | 10-54V | 10-54V | 10-54V | 10-48V | 10-42V | 10-34V | 10-32V | 10-29V |
| Output Power: | 5-27W | 7-37.8W | 9-48.6W | 10.5-50.4W | 12-50.4W | 14.5-49.3W | 16-51.2W | 17.5-50.8W |

| | |
|--------------------------|---|
| Current Accuracy: | ±3% |
| Max. Output Voltage: | 58Vdc |
| No Load Output Voltage: | 0Vdc |
| Dimming Range: | 0~100%, LED start at 0.1% possible. |
| PWM Frequency: | ≤4KHz |
| Working Temperature: | tc: 80°C ta: -30°C ~ 55°C |
| Working Humidity: | 20 ~ 95%RH, non-condensing |
| Storage Temp., Humidity: | -40 ~ 80°C, 10~95%RH |
| Temp. Coefficient: | ±0.03%/°C(0-50°C) |
| Vibration: | 10~500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes |

Protection

- Over-heat Protection:** Shut down the output when PCB temp. ≥110°C, auto recovers when temp. back to normal.
- Over Load Protection:** When O/P voltage exceed its range, O/P current declines, 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.** Auto detecting, auto recovers when load back to normal.

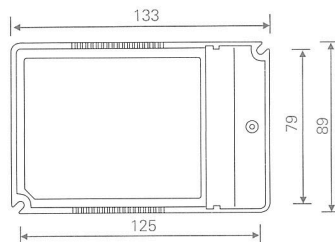
Safety & EMC

- Withstand Voltage:** I/P-O/P: 3750Vac
- Isolation Resistance:** I/P-O/P: 100MΩ/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

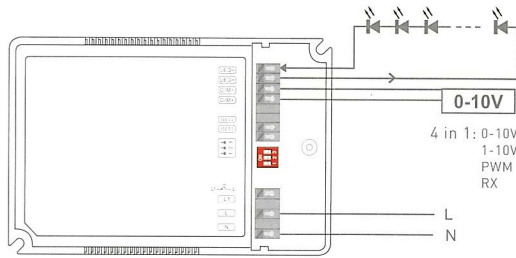
Others

- Dimension:** 133×89×30mm(L×W×H)
- Packing:** 135×90×35mm(L×W×H)
- Weight(G.W.):** 320g±10g

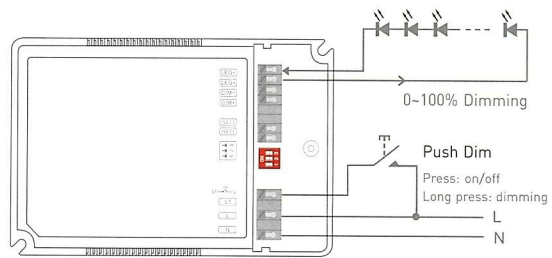
Dimensions



0-10V Connection

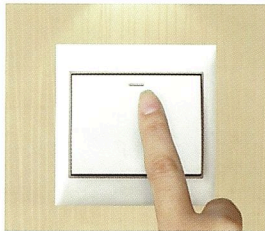


Push Dim Connection



The dimming interface priority: First 0-10V, next Push Dim.

Push Dimming

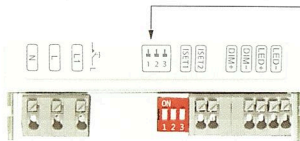


Reset Switch

- 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).

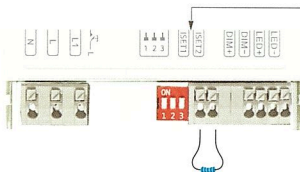


| | | | | | | | | | | |
|------------|--------|--------|--------|--------|--------|--------|--------|----|-----|--|
| | | | | | | | | | | |
| 500mA/ISET | 700mA | 900mA | 1050mA | 1200mA | 1450mA | 1600mA | 1750mA | ON | OFF | |
| 10-54V | 10-54V | 10-54V | 10-48V | 10-42V | 10-34V | 10-32V | 10-29V | | | |

* 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, 10-29V can power 3-9pcs LEDs, the max quantity of LEDs in series will be subject to the actual voltage of LED.

Advanced options: Dial DIP switch down , connect ISET port with resistors of different values to set up any current from 500mA to 1750mA (specific resistor values refer to the table).



Connect to resistor

| Connecting ISET with resistors can obtain the following typical currents. | | | | | | | | | | |
|---|----------|----------|---------|----------|---------|----------|---------|----------|----------|--|
| Current(mA) | 500mA | 550mA | 600mA | 650mA | 700mA | 750mA | 800mA | 850mA | 900mA | |
| Resistor(KΩ) | ∞ | 130.08KΩ | 83.5 KΩ | 60.02 KΩ | 46.37KΩ | 37.01 KΩ | 30.1 KΩ | 25.24 KΩ | 21.28 KΩ | |
| Current(mA) | 950mA | 1000mA | 1050mA | 1100mA | 1150mA | 1200mA | 1250mA | 1300mA | 1350mA | |
| Resistor(KΩ) | 18.15 KΩ | 15.65 KΩ | 13.5 KΩ | 11.62 KΩ | 10.8 KΩ | 8.78 KΩ | 7.57 KΩ | 6.41 KΩ | 5.65 KΩ | |
| Current(mA) | 1400mA | 1450mA | 1500mA | 1550mA | 1600mA | 1650mA | 1700mA | 1750mA | | |
| Resistor(KΩ) | 4.81 KΩ | 4.07 KΩ | 3.4 KΩ | 2.68KΩ | 2.13 KΩ | 1.63 KΩ | 1.18 KΩ | 0 KΩ | | |