

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

0-10V  
PUSH DIM

PWM  
Digital Dimming

PF  
>0.99

η > 85%  
Efficiency

Over-heat Protection

Short Circuit Protection

Over Load Protection

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.

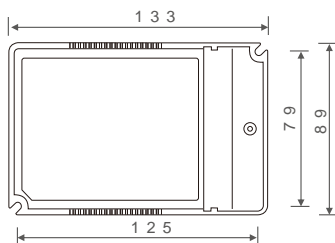
Safety & EMC

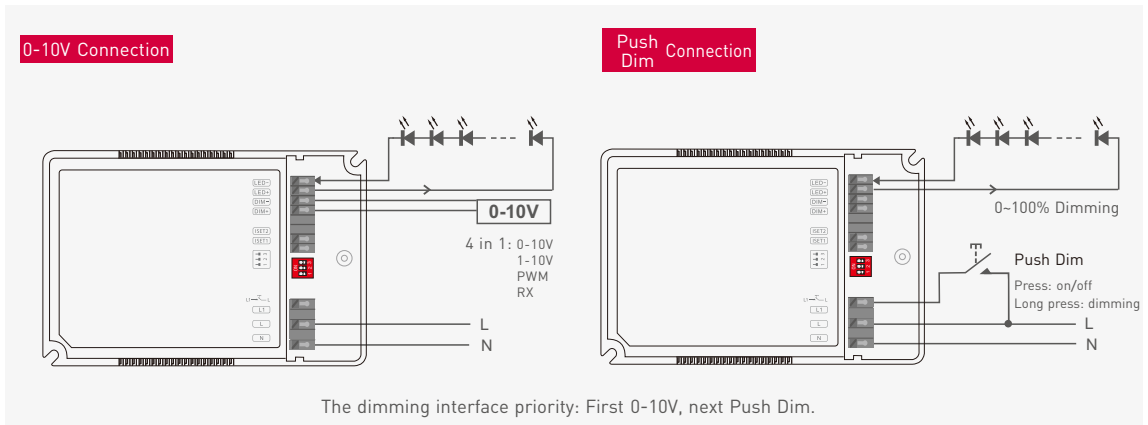
- Withstand Voltage:** I/P-O/P: 3750Vac
- Isolation Resistance:** I/P-O/P: 100MΩ/500VDC/25°C/70%RH
- Safety Standards:** IEC/EN61347-1, IEC/EN61347-2-13
- EMC Emission:** EN55015, EN61000-3-2 CLASS C, IEC61000-3-3
- EMC Immunity:** EN61000-4-2,3,4,5,6,8,11 EN61547

Others

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

Dimensions





## 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).

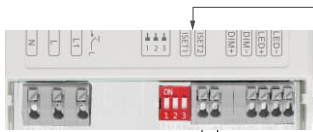


↓ ↓ ↓	↓ ↓ ↓	↓ ↓ ↓	↓ ↓ ↓	↓ ↓ ↓	↓ ↓ ↓	↓ ↓ ↓	↓ ↓ ↓	↓	↓
5 0 A ISET	700mA	90 0mA	1050mA	120 0mA	145 0mA	160 0mA	175 0mA	ON	OFF
10 -54V	10 -54V	10 -54V	10 -48V	10 -42V	10 -34V	10 -32V	10 -29V		

\* 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 (K)	∞	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 (K)	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 (K)	4.81 KΩ	4.07 KΩ	3.4 KΩ	2.68KΩ	2.13 KΩ	1.63 KΩ	1.18 KΩ	0 KΩ		