

LED Dimming Driver

0.54-25W 180-700mA 3-54Vdc

- Dimming interface: 1-10V(0-10V/10VPWM/resistor), Push Dim.
- 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.
- Class 2 power supply. Full protective plastic housing.
- Compliant with Safety Extra Low Voltage standard.
- Suitable for indoor environments.



Main Characteristics

Dimming Interface:	1-10V/0-10V/10VPWM/Resistor, Push Dim								Current Accuracy:	±3%
Input Voltage Range:	100-240Vac ±10%								No Load Output Voltage :	58Vdc
Frequency:	50/60Hz								Dimming Range:	0~100%, LED start at 0.1% possible.
Input Current:	115Vac≤0.30A, 230Vac≤0.18A								Working Temperature.:	tc: 80°C ta: -30°C ~ 55°C
Power Factor:	PF>0.99/115Vac , PF>0.95/230Vac, at full load								Working Humidity:	20 ~ 95%RH, non-condensing
THD:	≤9% at 115Vac, ≤12% at 230Vac (full load)								Storage Temp., Humidity:	-40 ~ 80°C, 10-95%RH
Efficiency:	≥85%								Temp. Coefficient:	±0.03%/°C(0-50°C)
Inrush Current(typ.):	Cold start 25A at 230Vac								Vibration:	10-500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes
Leakage Current:	<0.5mA/230Vac									
Output Voltage Range:	3-54Vdc									
Output Power Range:	0.54W-25W									
Output Current :	180mA	250mA	350mA	400mA	500mA	550mA	600mA	700mA		
Output Voltage :	3-54V	3-54V	3-54V	3-54V	3-50V	3-46V	3-42V	3-36V		
Output Power :	0.5W-9.7W	0.8W-13.5W	1.1W-18.9W	1.2W-21.6W	1.5W-25W	1.7-25.3W	1.8-25.2W	2.1-25.2W		

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.

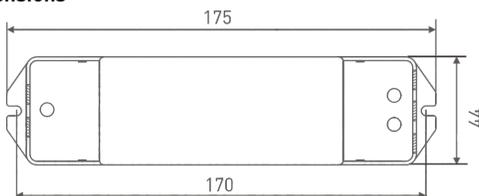
Safety & EMC

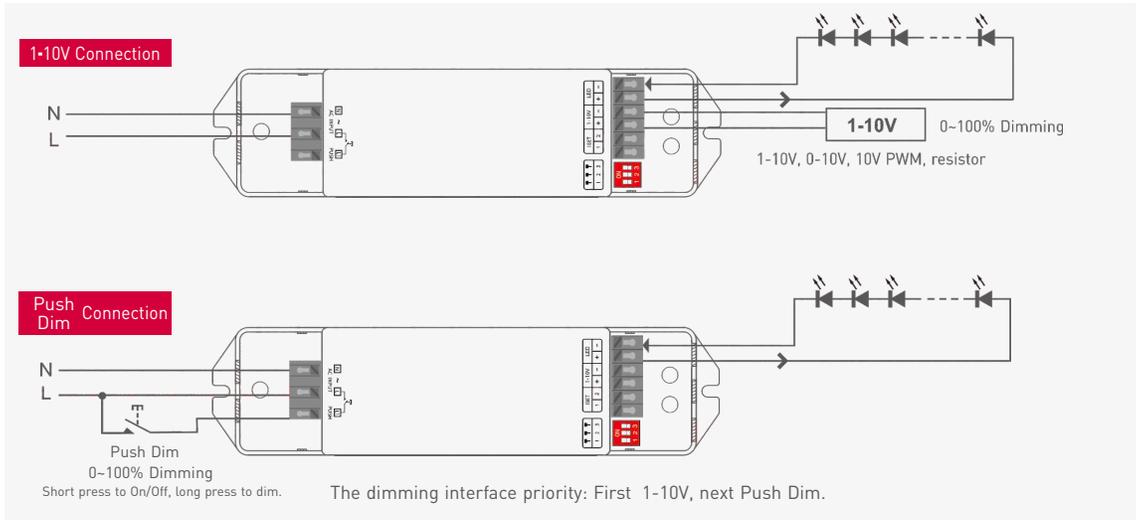
- Withstand Voltage: I/P-O/P: 3750Vac
- Isolation Resistance: I/P-O/P: 100MΩ/500VDC/25°C/70%RH
- Safety Standards: IEC/EN61347-1, IEC/EN61347-2-13
- EMC Emission: EN55015, EN61000-3-2 Class C, IEC61000-3-3
- EMC Immunity: EN61000-4-2,3,4,5,6,8,11, EN61547

Others

- Dimension: 175×44×30mm(L×W×H)
- Packing: 178×48×33mm(L×W×H)
- Weight(G.W.): 160g±10g

Dimensions





Push Dimming

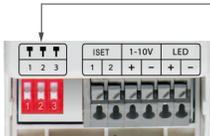


Reset Switch

- 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].

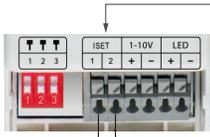


↑↑↑	↑↑↓	↑↓↑	↑↓↓	↓↑↑	↓↑↓	↓↓↑	↓↓↓	↑	↓
180mA/ISET	250mA	350mA	400mA	500mA	550mA	600mA	700mA	ON	OFF
3-54V	3-54V	3-54V	3-54V	3-50V	3-46V	3-42V	3-36V		

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

* E.g. LED 3.2V/pcs: 3-54V can power 1-16pcs LEDs in series, 3-36V can power 1-11pcs 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 180mA to 700mA (specific resistor values refer to the table).



Connect to resistor

Connecting ISET with resistors can obtain the following typical currents.

Current(mA)	180mA	200mA	225mA	250mA	275mA	300mA	325mA	350mA	375mA	400mA	425mA
Resistor(K)	∞	17.86 KΩ	15.59KΩ	13.78 KΩ	12.09 KΩ	10.6 KΩ	9.36 KΩ	8.36KΩ	7.28 KΩ	6.35 KΩ	5.6KΩ
Current(mA)	450mA	475mA	500mA	525mA	550mA	575mA	600mA	625mA	650mA	675mA	700mA
Resistor(K)	4.89 KΩ	4.16 KΩ	3.64 KΩ	3.09 KΩ	2.57 KΩ	2.1KΩ	1.63 KΩ	1.11 KΩ	0.726 KΩ	0.396KΩ	0KΩ