

LED Intelligent Driver

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

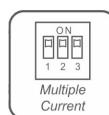
- Dimming interface: DMX512/RDM, Push Dim.
- With the RDM remote device management protocol,
- Supports DMX512 signal bi-directional communication.
- PWM digital dimming, no alter LED color temperature.
- Dimming range: 0~100%, LED start at 0.1% possible.
- Multiple current, wide voltage, compatible with a variety of LED lights.
- Power factor > 0.99, Efficiency > 85%.
- Short circuit / Over-temperature / Over load / Non-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.

RDM
DMXDimmable:
0.1%~100%

SELV



CE RoHS



Main Characteristics

Dimming Interface:	DMX512/RDM, 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
Non-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.

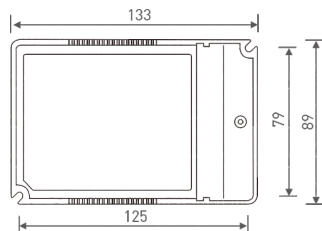
Safety & EMC

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

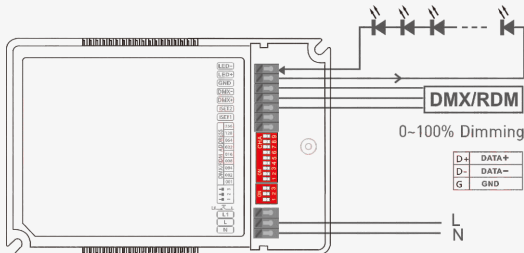
Others

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

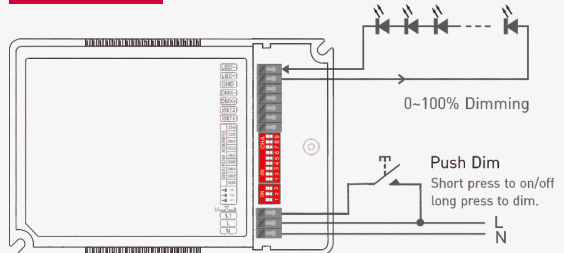
Dimensions



DMX/RDM Connection



Push Dim Connection



The dimming interface priority: First DMX/RDM, next Push Dim.

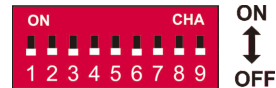
Push Dimming



Reset Switch

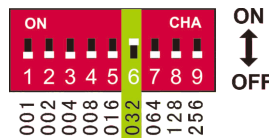
- On/off control: Short press.
- Stepless dimming: Long press.
- With every other long press, the light level goes to the opposite direction.
- Dimming memory: Brightness will be the same as previously adjusted when turning off and on again.

RDM Mode: The dip switch 1-9 are OFF.

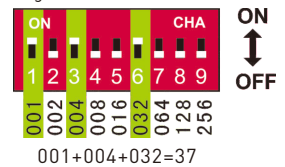


DMX Address Setting:

E.g.1: Set Initial Address To 32.



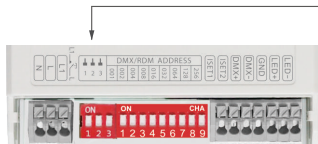
E.g.2: Set Initial Address To 37.



DMX address value=the total value of {1-9}
To get the place value when in "on" position,

LED Current Selection

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

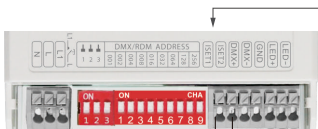


500mA/ISET 10-54V	700mA 10-54V	900mA 10-54V	1050mA 10-48V	1200mA 10-42V	1450mA 10-34V	1600mA 10-32V	1750mA 10-29V	ON OFF
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* After current setting by DIP switch, power off and then power on to make the new current effective.

* 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 $\downarrow\downarrow\downarrow$, 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]	∞	21.2K Ω	18.95 K Ω	17 K Ω	15.3K Ω	13.9 K Ω	12.64 K Ω	11.39 K Ω	10.3 K Ω
Current[mA]	950mA	1000mA	1050mA	1100mA	1150mA	1200mA	1250mA	1300mA	1350mA
Resistor[K]	9.38 K Ω	7.95 K Ω	7.18 K Ω	6.52 K Ω	5.87 K Ω	5.25 K Ω	4.62 K Ω	4.13 K Ω	3.69 K Ω
Current[mA]	1400mA	1450mA	1500mA	1550mA	1600mA	1650mA	1700mA	1750mA	
Resistor[K]	3.24 K Ω	2.79K Ω	2.31 K Ω	2.03K Ω	1.63 K Ω	1.31 K Ω	1.05 K Ω	0 K Ω	