AD-25-150-900-U1P1

LTECH

0-10V
Push Dim

LED Intelligent Driver

1.5~25W 150~900mA 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.
- Multi-current & wide voltage, suitable for different power LED.
- Short circuit / Over-heat / 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 internal lights application for Ⅰ/Ⅱ/Ⅲ.

SELV RoHS

0-10V PUSH DIM | PWM Digital Dimming | PF >0.97 | >85% Efficiency | Over-heat Protection | Short Circuit Protection | Over Load Protection | Multiple Current (ON 1 2 3)

Main Characteristics

Dimming Interface:	0-10V (1-10V/PWM/RX), Push Dim
Input Voltage Range:	100-277Vac ±10% (Max. 90-305Vac)
Frequency:	50/60Hz
Input Current:	115Vac≤0.3A, 230Vac≤0.2A, 277Vac≤0.15A
Power Factor:	PF>0.97/115Vac, PF>0.93/230Vac, PF>0.85/277Vac (full load)
THD:	<16%/115Vac, <20%/230Vac, <22%/277Vac, (full load)
Efficiency:	>85%
Inrush Current(typ.):	Cold start 10A at 230Vac (twidth=75μs measured at 50% Ipeak)
Control Surge Capability:	L-N: 1kV
Leakage Current:	<0.5mA/230Vac
Operating Voltage:	10-54Vdc
Output Power Range:	1.5W~25W

Output Current：	150mA	250mA	300mA	350mA	500mA	600mA	700mA	900mA
Output Voltage：	10-54V	10-54V	10-54V	10-54V	10-50V	10-42V	10-36V	10-28V
Output Power：	1.5W-8.1W	2.5W-13.5W	3W-16.2W	3.5W-18.9W	5W-25W	6-25.2W	7-25.2W	9-25.2W

Current Accuracy:	±5%
Max. Output Voltage:	58Vdc
Non-load Output Voltage:	0Vdc
Dimming Range:	0~100%, LED start at 0.1% possible.
PWM Frequency:	≤4KHz
Working Temperature:	ta: -30°C ~ 55°C tc: 75°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:	Shut down the output when rated power≥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.

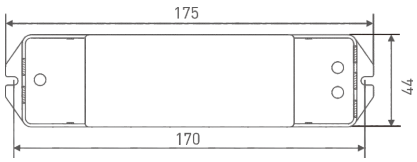
Safety & EMC

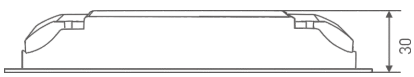
Withstand Voltage:	I/P-O/P: 3750Vac
Isolation Resistance:	I/P-O/P: 100MΩ/500VDC/25°C/70%RH
Safety Standards:	IEC/EN61347-1, IEC/EN61347-2-13
EMC Emission:	EN55015, EN61000-3-2 Class C, IEC61000-3-3
EMC Immunity:	EN61000-4-2,3,4,5,6,8,11 EN61547

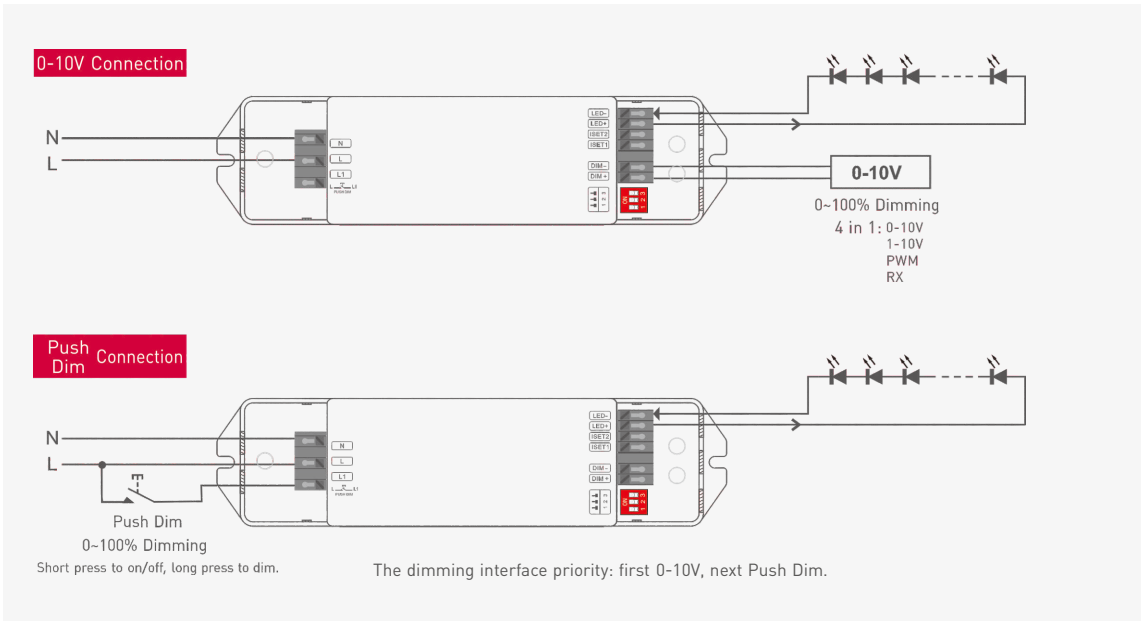
Others

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

Dimensions







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

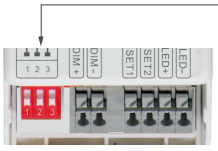
Push Dimming

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).

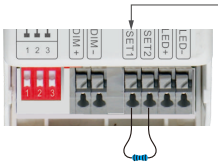


150mA	250mA	300mA	350mA	500mA	600mA	700mA	900mA	ON	OFF
10-54V	10-54V	10-54V	10-54V	10-50V	10-42V	10-36V	10-28V		

✻ 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, 10-28V can power 3-8pcs LEDs, the max quantity of LEDs in series will be subject to the actual voltage of LED.

Advanced options: connect ISET port with resistors of different values to set up any current from 150mA to 900mA. (specific resistor values refer to the table).



Connect t œesistor

Connecting ISET with resistors can obtain the following typical currents.										
Current (mA)	200mA	250mA	300mA	350mA	400mA	450mA	500mA	550mA	600mA	650mA
Resistor (KΩ)	34KΩ	26.93KΩ	22.3KΩ	18.98 KΩ	15.93 KΩ	13.31 KΩ	11.45 KΩ	9.53KΩ	8.23 KΩ	6.72KΩ

Current (mA)	700mA	750mA	800mA	850mA	900mA
Resistor (KΩ)	5.62 KΩ	4.58 KΩ	3.64 KΩ	2.81 KΩ	