TD-150-12-E1M1

LTECH

Triac Push DIM

LED Intelligent Driver

150W 12.5A 12Vdc

- Dimming interface: Triac/ELV, Push DIM.
- Apply to leading edge and trailing edge Triac dimmers.
- Build-in high performance MCU, dimming curve can be customized.
- PWM digital dimming, no alter LED color rendering index.
- Dimming range: Max. 0.1~100%.
- Efficiency > 85%.
- Short circuit / Over-heat / Over load / Over voltage protection.
- Compliant with Safety Extra Low Voltage standard.
- Suitable for indoor environments.

Dimmable:
0.1%-100%

SELV RoHS

Triac Push DIM | PWM Digital Dimming | >85% Efficiency | Over-heat Protection | Short Circuit Protection | Over Load Protection | V Over voltage protection

Main Characteristics

Dimming Interface:	Triac/ELV, Push DIM
Input Voltage Range:	200-240Vac ±10%
Frequency:	50/60Hz
Input Current:	230Vac⩽1.4A
Efficiency:	>85%
Inrush Current(typ.):	Cold start 50A at 230Vac
Control surge capability:	L-N: 1kV, L/N-G: 2kV
Leakage Current:	I/P-O/P: <0.5mA/230Vac, I/P-GND: <0.75mA/230Vac
Output Current:	Max. 12.5A
Output Voltage:	12Vdc
Output Voltage Range:	12Vdc ±0.5Vdc
Ripple & Noise:	⩽200mV
Output Power:	Max. 150W
Output Power Range:	1~150W
Overload Power Limitation:	⩾102%~125%
PWM Frequency:	2KHz-4KHz
Dimming Range:	Max. 0.1~100%.
Working Temperature.:	tc: 90°C ta: -30°C ~ 60°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

✻ The dimming range parameters adopted LUTRON® dimming system as testing standards. The parameters may differ by using Triac/ELV dimming systems of different brands. We can customize program for clients' high requirements.
Attn: LUTRON® is registered trademarks of Lutron Electronics Co., Inc. registered in the U.S. and other countries.

Protection

Over Temp. Protection:	Shut down the output when PCB temp.⩾110°C, auto recovers when temp. back to normal.
Over Voltage Protection:	No-load voltage⩾13~18V, re-power on to recover after fault condition is removed.
Over Load Protection:	Current load⩾102%~125%, recovers automatically after fault condition is removed.
Short Circuit Protection:	Shut down automatically if short circuit occurs, auto recovers after faulty condition is removed.

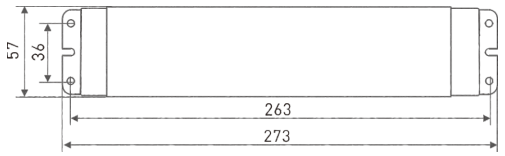
Safety & EMC

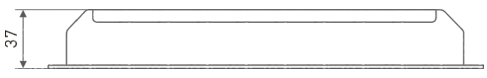
Withstand Voltage:	I/P-O/P: 3750Vac I/P-GND: 1800Vac
Isolation Resistance:	I/P-O/P: 100MΩ/500VDC/25°C/70%RH
Safety Standards:	IEC/EN61347-1, IEC/EN61347-2-13
EMC Emission:	EN55015, EN61000-3-2 Class C, IEC61000-3-3
EMC Immunity:	EN61000-4-2,3,4,5,6,8,11, EN61547

Others

Dimension:	273×57×37mm(L×W×H)
Packing:	285×63×43mm(L×W×H)
Weight(G.W.):	790g±10g

Dimensions

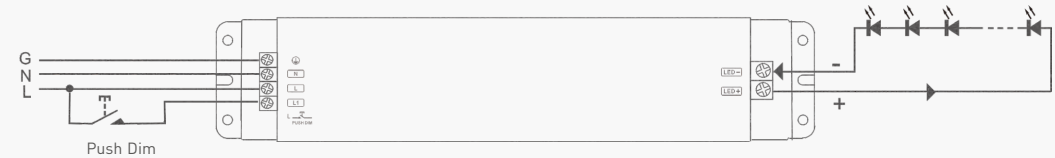




Triac Connection

Triac Dim
0~100% Dimming

Push Dim Connection



Push Dim
0~100% Dimming
Short press to on/off, long press to dim.

The dimming interface priority: First Triac, next Push Dim.

Selecting between ordinary dimmer and dimming system

Ordinary dimmer and dimming system have different dimming precision, precision of dimming system is higher. To meet customers' requirements on perfect dimming effects, we LTECH designed two programme options.

Method: Turn off the power and then remove the housing of the LED driver to find right component on the PCB. Shift system by selecting different contact pin (for installation professionals use only). Factory default as common (for ordinary dimmer).

Common

Ordinary dimmer

System

Dimming system

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.