AD-15-100-700-E1A1

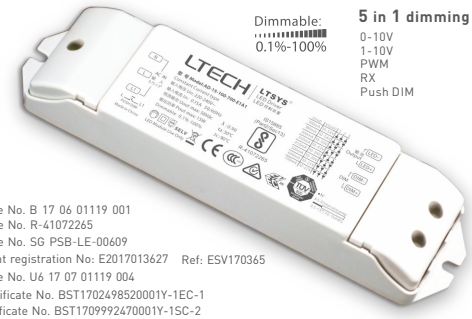
LTECH

0-10V Push DIM

LED Intelligent Driver

1~15W 100~700mA 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.
- Non-load output voltage 0V to prevent damages to LED caused by poor contact.
- Multi-current & wide voltage, suitable for different power LED.
- Short circuit / Over-heat / Over load / Non-load protection.
- Class 2 power supply. Full protective plastic housing.
- Compliant with Safety Extra Low Voltage standard.
- Suitable for internal lights application for Ⅰ/Ⅱ/Ⅲ.



TUV	Certificate No. B 17 06 01119 001
BIS	Certificate No. R-41072265
CB	Certificate No. SG PSB-LE-00609
RCM	Equipment registration No: E2017013627 Ref: ESV170365
ENEC	Certificate No. U6 17 07 01119 004
CE	EMC Certificate No. BST17024985200001Y-1EC-1 LVD Certificate No. BST17099924700001Y-1SC-2
CCC	Certificate No. 2017011002993755

IS15885 (Part2/Sec13) R-41072265

0-10V Push DIM | PWM Digital Dimming | PF >0.9 | >83% 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:	220-240Vac ±10%
Frequency:	50/60Hz
Input Current:	230Vac≤0.15A
Power Factor:	PF>0.9/230Vac, at full load
THD:	≤20% at 230Vac, at full load
Efficiency:	>83%
Inrush Current(typ.):	Cold start 2.28A at 230Vac (twidth=36μs measured at 50% Ipeak)
Control Surge Capability:	L-N: 1kV
Leakage Current:	<0.5mA/230Vac
Operating Voltage:	10-54Vdc

Output Power Range:	1W~15W
Current Accuracy:	±3%
Max Output Voltage:	58Vdc
Non-load Output Voltage:	0Vdc
PWM Frequency:	≤4KHz
Dimming Range:	0~100%, LED start at 0.1% possible.
Working Temperature:	tc: 90°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

Output Current：	100mA	180mA	300mA	350mA	450mA	500mA	600mA	700mA
Output Voltage：	10-54V	10-54V	10-50V	10-43V	10-34V	10-30V	10-25V	10-22V
Output Power：	1W-5.4W	1.8W-9.72W	3W-15W	3.5W-15.05W	4.5W-15.3W	5W-15W	6W-15W	7W-15.4W

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

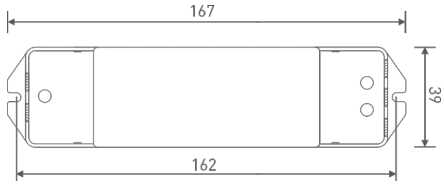
Withstand Voltage:	I/P-O/P: 3750Vac
Isolation Resistance:	I/P-O/P: 100MΩ/500VDC/25°C/70%RH
Safety Standards:	IEC/EN61347-1, IEC/EN61347-2-13
EMC Emission:	EN55015, EN61000-3-2 Class C, IEC61000-3-3
EMC Immunity:	EN61000-4-2,3,4,5,6,8,11 EN61547

Others

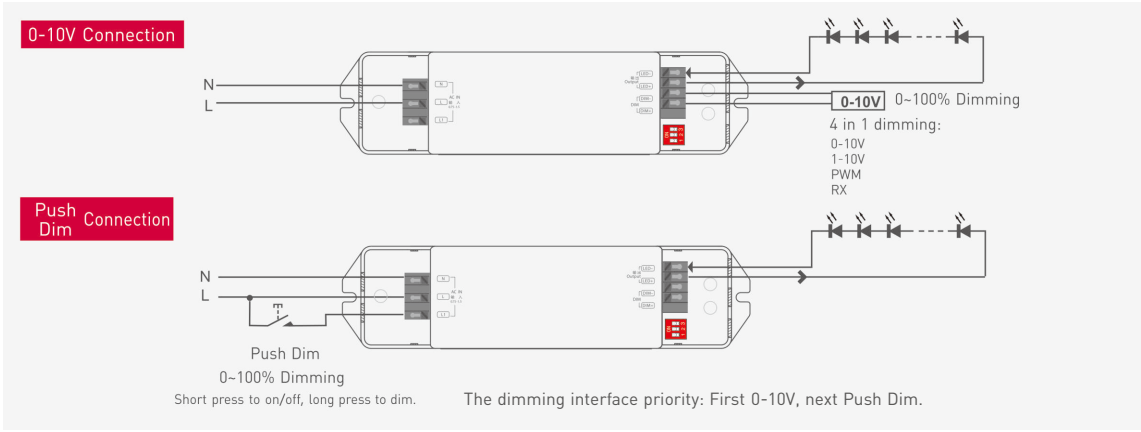
Dimension:	167×39×30mm(L×W×H)
Packing:	168×41×32mm(L×W×H)
Weight(G.W.):	160g±10g

Dimensions

Unit: mm



Connections



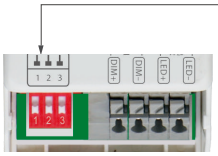
Push Dimming

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).

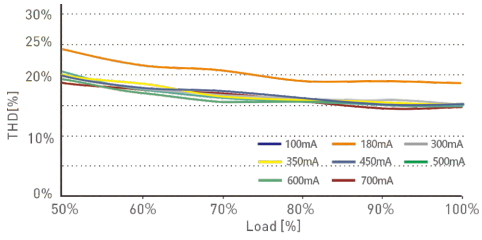


100mA	180mA	300mA	350mA	450mA	500mA	600mA	700mA	ON	OFF
10-54V	10-54V	10-50V	10-43V	10-34V	10-30V	10-25V	10-22V		

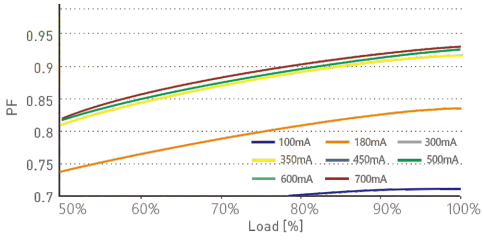
✻ After current setting by DIP switch, power off and then power on to make the new current effective.

✻ E.g. LED 3.2V/pcs: 10-54V can power 3-16pcs LEDs in series, 10-22V can power 3-6pcs LEDs, the max quantity of LEDs in series will be subject to the actual voltage of LED.

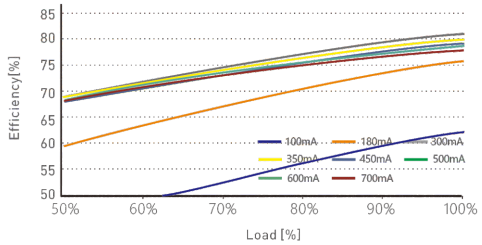
Relationship Diagrams



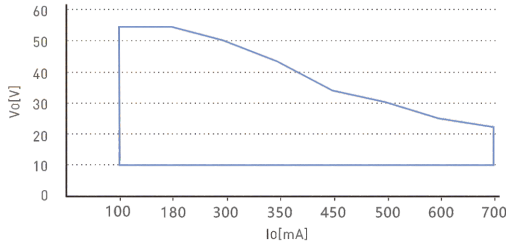
THD vs Load



Power Factor Characteristic



Efficiency vs Load



Current vs voltage