DALI-50-500-1750-F1P2

LTSYS

DALI, 1-10V Push Dim

LED Intelligent Driver

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

- Dimming interface: DALI, 1-10V (0-10V,10V PWM,resistor), Push Dim.
- PWM digital dimming, no alter LED color rendering index.
- Dimming range: 0~100%, LED start at 0.1% possible.
- Power factor > 0.99, Efficiency > 85%.
- Multiple current, wide voltage, compatible with a variety of LED lights.
- 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.
- DALI bus standard: IEC62386-101, 102, 207.
- Compliant with Safety Extra Low Voltage standard.
- Suitable for indoor environments.

SELV RoHS

DALI 1-10V PUSH DIM | PWM Digital Dimming | PF >0.99 | >85% Efficiency | Over-heat Protection | Short Circuit Protection | Over Load Protection | Multiple Current

Main Characteristics

Dimming Interface:	DALI, 1-10V (0-10V,10V PWM,resistor), Push Dim	Output Power Range:	5W~50W
Dimming Range:	0~100%, LED start at 0.1% possible.	Current Accuracy:	±3%
Input Voltage Range:	100-240Vac ±10%	Max Output Voltage:	58Vdc
Input Current:	115Vac≤0.6A, 230Vac≤0.3A	No Load Output Voltage:	0Vdc
Power Factor:	PF>0.99/115Vac, PF>0.95/230Vac, at full load	Working Temperature:	tc: 80°C ta: -30°C ~ 55°C
Frequency:	50/60Hz	Working Humidity:	20 ~ 95%RH, non-condensing
Efficiency:	>85%	Storage Temp., Humidity:	-40 ~ 80°C, 10~95%RH
Inrush Current(typ.):	Cold start 50A at 230Vac	Temp. Coefficient:	±0.03%/°C(0-50°C)
Control Surge Capability:	L-N: 1kV	Vibration:	10~500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes
Leakage Current:	<0.5mA/230Vac		
THD:	<10% at 115Vac, <20% at 230Vac (full load)		

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

Protection

Over-heat Protection:	Ambient Temp.≥65°C, shut down the output, auto recovers when re-power on.
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.

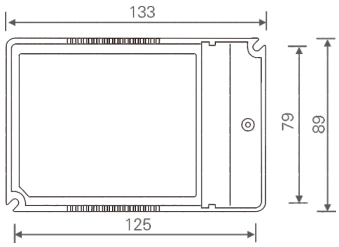
Safety & EMC

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

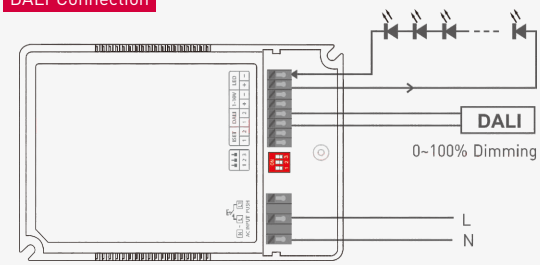
Others

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

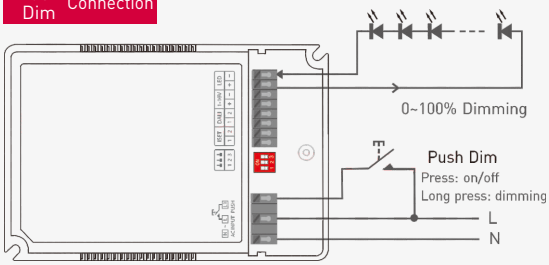
Dimensions



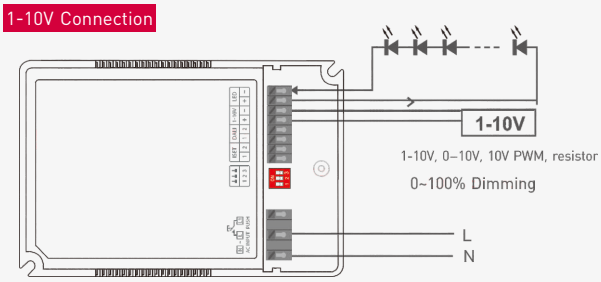
DALI Connection



Push Dim Connection



1-10V Connection



The dimming interface priority: First DALI, next 1-10V, the last one Push Dim.

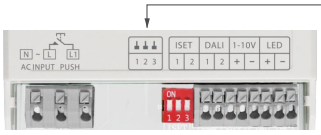
Push Dimming

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).

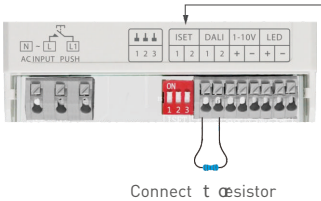


500mA /SET	700mA	900mA	1050mA	1200mA	1450mA	1600mA	1750mA	ON	OFF
10 -54V	10 -54V	10 -54V	10 -48V	10 -42V	10 -34V	10 -32V	10 -29V		

✻ 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 , 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 t esistor

Connecting ISET with resistors can obtain the following typical currents.									
Current (mA)	500mA	550mA	600mA	650mA	700mA	750mA	800mA	850mA	900mA
Resistor (KΩ)	∞	21.2KΩ	18.95 KΩ	17 KΩ	15.3KΩ	13.9 KΩ	12.64 KΩ	11.39 KΩ	10.3 KΩ
Current (mA)	950mA	1000mA	1050mA	1100mA	1150mA	1200mA	1250mA	1300mA	1350mA
Resistor (KΩ)	9.38 KΩ	7.95 KΩ	7.18 KΩ	6.52 KΩ	5.87 KΩ	5.25 KΩ	4.62 KΩ	4.13 KΩ	3.69 KΩ
Current (mA)	1400mA	1450mA	1500mA	1550mA	1600mA	1650mA	1700mA	1750mA	
Resistor (KΩ)	3.24 KΩ	2.79KΩ	2.31 KΩ	2.03KΩ	1.63 KΩ	1.31 KΩ	1.05 KΩ	0 KΩ	