

LED Driver (constant Voltage)

- ultra-thin volume; The shell is made of PC flame retardant V0 grade raw material, and the clamshell is integrated.
- DALI-2 DT8 dimming color temperature driver.
- Adopt constant power design that can adjust different color temperature while brightness remains the same.
- Dimming from 0~100%, down to 0.01%.
- The color temperature can be set through the DALI main control, the adjustment range is 1000K-10000K, and the default range is 2700-6500K.
- Flicker-Free (0-100% Dimming), meeting high-frequency exemption compliance level.
- High-performance power supply: 93% efficiency, PF>0.97, THD<10%.
- In line with the EU Energy Efficiency ERP Directive, the power consumption of no-load and network standby < 0.5W.
- Innovative thermal management technology intelligently protects the life of the power supply.
- Overheat, overload, short circuit protection and automatic recovery
- Suitable for Class II/III indoor light fixtures.
- Suitable for indoor lighting such as light strips and magnetic track light.
- 5-year warranty.



Flicker-Free
IEEE 1789
Achieve the exemption level.

Dimmable:
1: 10000



The certification icon represents undergoing certification applications only, and final certification qualification subject to actual product.

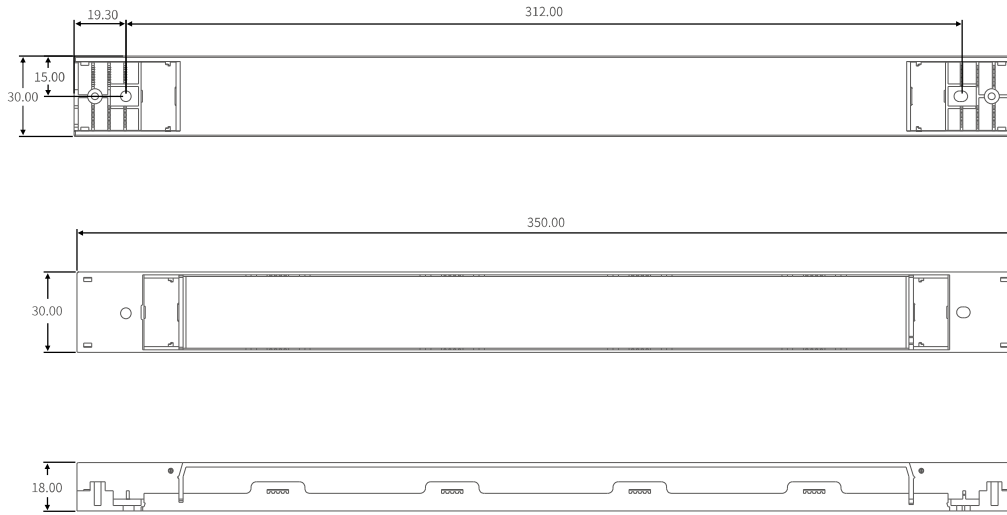


Technical Specs

Model	SN-150-24-G2D			
Features	Output Type	Constant voltage		
	Dimming Interface	DALI-2 DT8, PUSH DIM/CCT		
	Output Feature	Isolation		
	Protection Grade	IP20		
OUTPUT	Insulation Grade	Class II (Suitable for class I / II / III light fixtures)		
	Output Voltage	24Vdc		
	Output Voltage Range	24Vdc±0.5Vdc		
	Output Current	Max. 6.25A		
	Output Power	Max. 150W		
	Output Power Range	0-150W		
	Overload Power Limitation	≥102%		
	Ripple & Noise	Ripples≤500mV, Noise≤500mV		
	INPUT	AC Voltage Range	220-240Vac	
		DC Voltage Range	220-240Vdc(EMI needs to be evaluated after the luminaire is installed)	
Frequency		50/60Hz		
Input Current		Max. 0.75A/230Vac		
Power Factor		PF > 0.97(at full load)		
THD		THD < 10%(at full load)		
Maximum input power		Max. 162W		
Efficiency (Typ.)		93%		
Inrush Current		Cold start 45A(Test twidth=350us tested under 50% Ipeak)/230Vac		
Anti Surge		L-N: 2KV		
Leakage Current		Max. 0.5mA		
ENVIRONMENT	Working Temperature	ta: -20 ~ 45°C tc: 90°C		
	Working Humidity	20 ~ 95%RH, non-condensing		
	Storage Temperature/Humidity	-40 ~ 80°C/10~95%RH		
	Temperature Coefficient	±0.03%/°C(0-45°C)		
	Vibration	10~500Hz, 2G 12min/1cycle, 72 min for X, Y and Z axes respectively		
PROTECTION	Overload Protection	Shut down the output when rated power≥102%, auto recovers		
	Overheat Protection	Intelligently adjust or turn off the output current if the PCB temperature ≥110°C, and recover automatically		
	Overvoltage Protection	Shut down the output when voltage≥30V, and recover automatically		
	Short Circuit Protection	Enter hiccup mode if short circuit occurs, and recover automatically		
SAFETY & EMC	Withstand Voltage	I/P-O/P: 3750Vac		
	Insulation Resistance	I/P-O/P: 100MΩ/500VDC/25°C/70%RH		
	Safety Standards	CCC	China	GB19510.1, GB19510.14, GB19510.213
		TUV	Germany	EN61347-1, EN61347-2-13, EN62493
		CB	CB Member States	IEC61347-1, IEC61347-2-13
		CE	European Union	EN61347-1, EN61347-2-13, EN62384
		KC	Korea	KC61347-1, KC61347-2-13
		EAC	Russia	IEC61347-1, IEC61347-2-13
		RCM	Australia	AS 61347-1, AS 61347-2-13
		ENEC	Europe	EN61347-1, EN61347-2-13, EN62384
	BIS	India	IS 15885 (PART 2/SEC 13)	
	EMC Emission	CCC	China	GB/T17743, GB17625.1
		CE	European Union	EN55015, EN61000-3-2, EN61000-3-3, EN61547
KC		Korea	KN15, KN61547	
EAC		Russia	IEC62493, IEC61547, EH55015	
RCM		Australia	EN55015, EN61000-3-2, EN61000-3-3, EN61547	
EMC Immunity	EN61000-4-2,3,4,5,6,8,11, EN61547			
ErP	Power Consumption	Networked standby	< 0.5W(After shutdown by command)	
		No-load power consumption	< 0.5W(When the lamp is not connected)	
	Flicker/Stroboscopic Effect	IEEE 1789	Meet IEEE 1789 standard/High frequency exemption level	
		CIE SVM	Pst LM≤1.0, SVM≤0.4	
	DF	Phase factor	DF≥0.9	
OTHERS	Weight(N.W.)	211g±10g		
	Dimensions	350×30×18mm(L×W×H)		

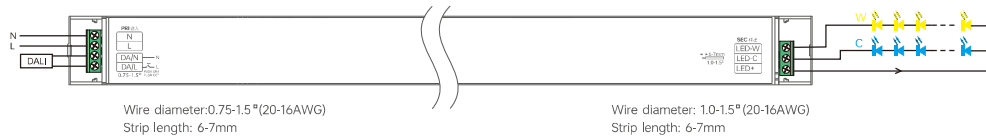
Product Size

Unit: mm

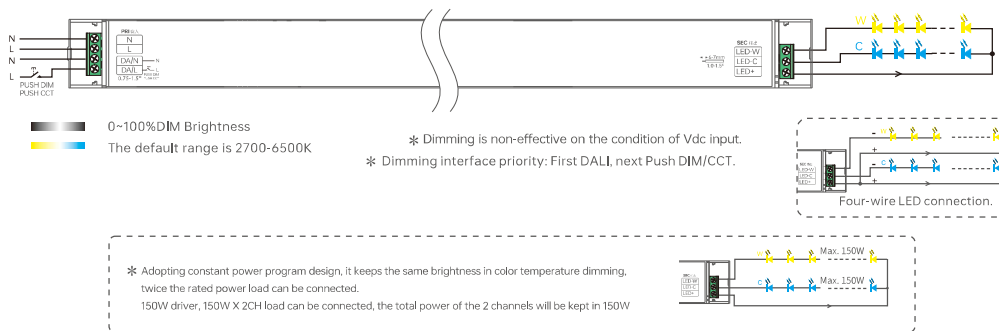


Wiring Diagram

DALI Connection



Push DIM/CCT Connection



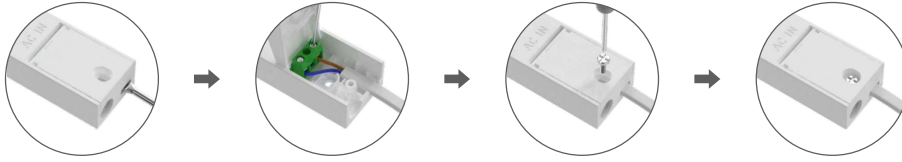
Push DIM/CCT



PUSH DIM

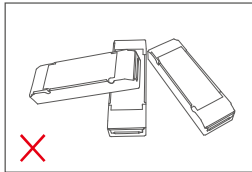
- Short press : on/off control
- Double-click: Toggle brightness/color temperature mode
- Long press : Adjust the current mode
- Dimming memory : When the light is switched on/off again, the light will resumes to the previously set brightness level.

Application Diagram of Protective Cover

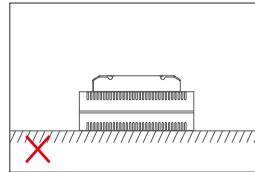
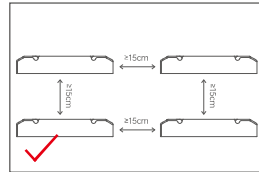


1. Put the head of the screwdriver at the cable entry to pry up the protective cover, then connect the wires as the wiring diagram shown.
2. After closing the protective cover, tighten the protective cover with the PA screws.

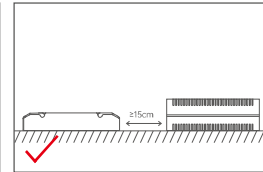
Installation Precautions



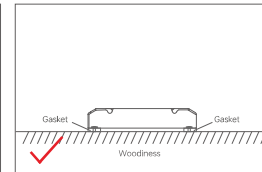
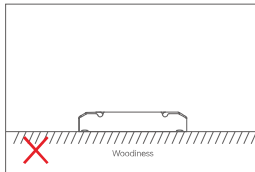
Please do not stack the products. The distance between two products should be $\geq 15\text{cm}$ so as not to affect heat dissipation or the lifetime of the products.



Please not place the products on power supplies. The distance between the product and the power supplies should be $\geq 15\text{cm}$ so as not to affect heat dissipation or shorten the lifetime of the products.

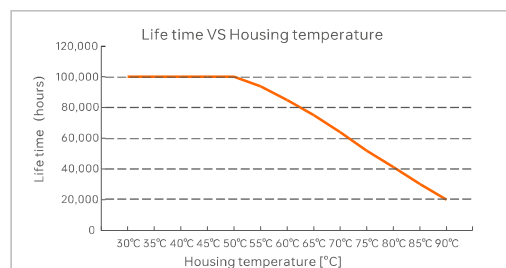
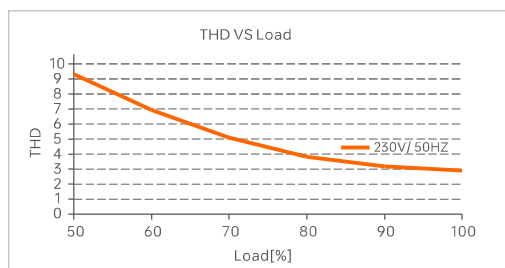
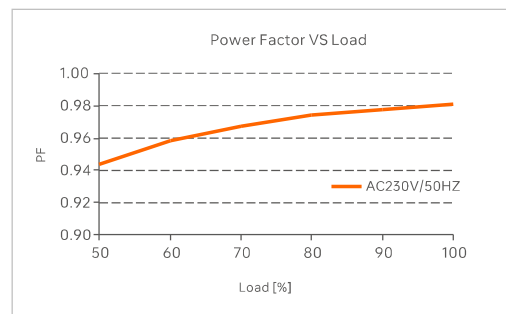
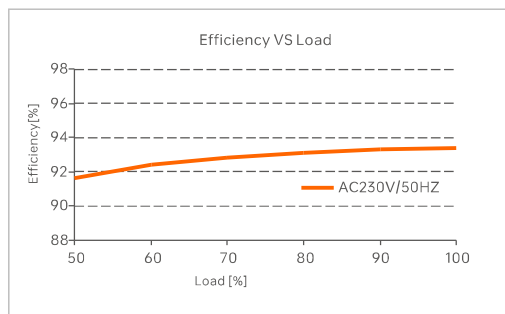


Note: The temperature within the installation area should be within the working temperature range of the products. Please do not install products inside LED fixtures to avoid temperature exceeding the working temperature that may affect the product lifetime.



Do not fix the product screws tightly against the wooden board. Instead, add a washer with a thickness of $\geq 7\text{mm}$ under the fixing screws. Leaving some gaps can effectively dissipate heat, preventing any impact on the product's heat dissipation performance and service life.

Relationship Diagrams



Surge Current & Corresponding Miniature Circuit Breaker (MCB) Load Capacity Table

MCB Model	B10	B13	B16	B20	B25	C10	C13	C16	C20	C25	D10	D13	D16	D20	D25
Maximum Load Capacity	4	5	6	8	11	7	9	11	14	18	9	11	15	20	26

Remarks:

1. Test Conditions: Cold start 45A (Test twidth=350us tested under 50% Ipeak)/230Vac
2. The number of supported drivers may vary depending on the brand and model of the MCB.
3. It is recommended not to exceed the specified load capacity during on-site installation. The actual load should be determined based on field conditions.
4. If the ambient temperature exceeds 30°C or multiple MCBs are installed side by side, the number of installed drivers must be reduced and recalculated accordingly.
5. Electricians typically use Type B MCBs for residential lighting and Type C MCBs for commercial lighting applications.
6. Different testing equipment may yield variations in measured current peaks and pulse widths. Always use professional-grade instruments for accurate testing.

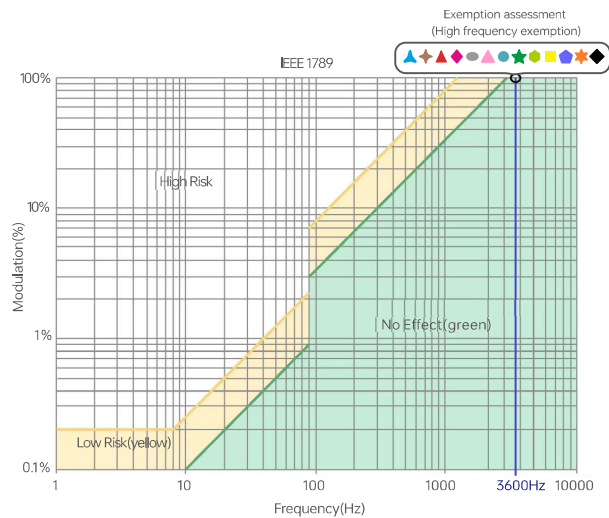
Flicker Test Table

IEEE 1789

Limit Value of Modulation in Low Risk Areas	
Waveform frequency of Optical output (f)	Limit value (%)
$f \leq 8\text{Hz}$	0.2
$8\text{Hz} < f \leq 90\text{Hz}$	$0.025 \times f$
$90\text{Hz} < f \leq 1250\text{Hz}$	$0.08 \times f$
$f > 1250\text{Hz}$	Exemption assessment
Limit Value of Modulation in No Effect Areas	
Waveform frequency of Optical output (f)	Limit value (%)
$f \leq 10\text{Hz}$	0.1
$10\text{Hz} < f \leq 90\text{Hz}$	$0.01 \times f$
$90\text{Hz} < f \leq 3125\text{Hz}$	$(0.08/2.5) \times f$
$f > 3125\text{Hz}$	Exemption assessment (High frequency exemption)

Brightness

- ▲ 0.1%
- ◆ 1%
- ▲ 5%
- ◆ 10%
- 20%
- ▲ 30%
- 40%
- ★ 50%
- 60%
- 70%
- 80%
- ★ 90%
- ◆ 100%



Marks in the right chart are tested results of different current levels. The output frequency is 0Hz in 100% brightness and its corresponding modulation is 0%, which could not be shown in the right chart.

Transportation and Storage

1. Transportation

Products can be shipped via vehicles, boats and planes. During transportation, products should be protected from rain and sun. Please avoid severe shock and vibration during the loading and unloading process.

2. Storage

The storage conditions should comply with the Class I Environmental Standards. The products that have been stored for more than six months are recommended to be re-inspected and can be used only after they have been qualified.

Attentions

- Product installation and commissioning should be done by a qualified professional.
 - LTECH products are not lightningproof non-waterproof (special models excepted). Please avoid the sun and rain. When installed outdoors, please ensure they are mounted in a water proof enclosure or in an area equipped with lightning protection devices.
 - Good heat dissipation will prolong the working life of products. Please ensure good ventilation.
 - Please check if the working voltage used complies with the parameter requirements of products.
 - The diameter of wire used must be able to load the light fixtures you connect and ensure the firm wiring.
 - Before you power on products, please make sure all the wiring is correct in case of incorrect connection that causes damage to light fixtures.
 - If a fault occurs, please do not attempt to fix products by yourself. If you have any question, please contact your suppliers.
- * This manual is subject to changes without further notice. Product functions depend on the goods. Please feel free to contact our official distributors if you have any question.

Warranty Agreement

- Warranty periods from the date of delivery: 5 years.
- Free repair or replacement services for quality problems are provided within warranty periods.

Warranty exclusions below:

- Beyond warranty periods.
- Any artificial damage caused by high voltage, overload, or improper operations.
- Products with severe physical damage.
- Damage caused by natural disasters and force majeure.
- Warranty labels and barcodes have been damaged.
- No any contract signed by LTECH.

1. Repair or replacement provided is the only remedy for customers. LTECH is not liable for any incidental or consequential damage unless it is within the law.
2. LTECH has the right to amend or adjust the terms of this warranty, and release in written form shall prevail.

Update Log

Version	Updated Time	Update Content	Updated by
A0	2025.05.30	Original version	Li Haipeng