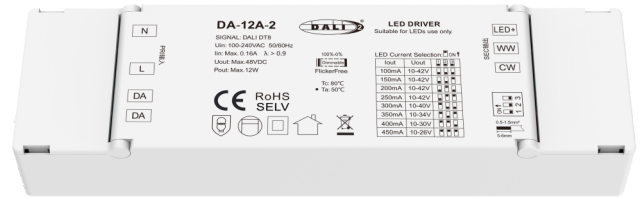


# DA-12A-2



## DALI CCT Constant Current LED Driver

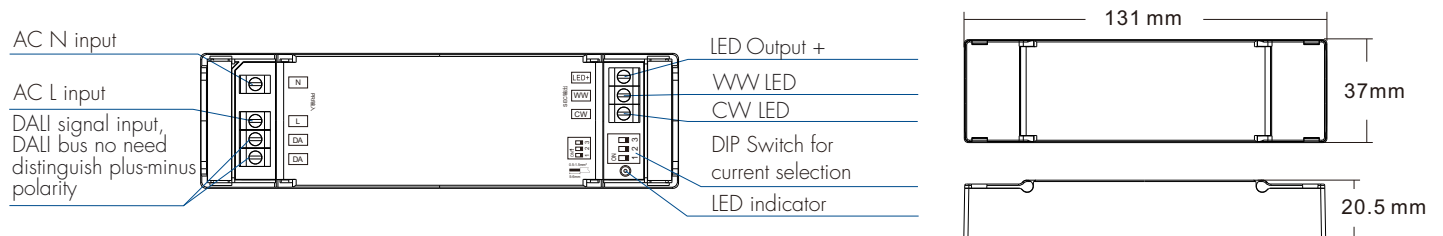
- Support DALI-2 dimming mode.
- In accordance with DALI standard protocol IEC 62386-102, IEC 62386-207, IEC 62386-209 and in compliance with DALI products from other international incorporation.
- PWM digital dimming, standard DALI logarithmic dimming curve.
- DALI address will be automatically assigned by DALI master, 1 DALI address.
- Universal AC input / Full range, High PF, High efficiency, Flicker Free.
- Standby power input<0.5W, meets the requirements of ErP certification.
- Multi-current & wide voltage, suitable for different power LEDs.
- Over-heat / Over-load / Short circuit protection, recover automatically.
- Class II design, SELV safety ultra-low voltage.
- Suitable for indoor LED lighting application.
- 5 Year, 50,000hr warranty.



### Applications

- Suitable for downlight, spotlight and decorative applications.
- Office / Commercial / Domestic Lighting, Hotels, Classrooms, Warehouse, Health care, Retail and Display.
- Use for retrofit upgrades & new luminaire designs.

### Mechanical Structures and Installations



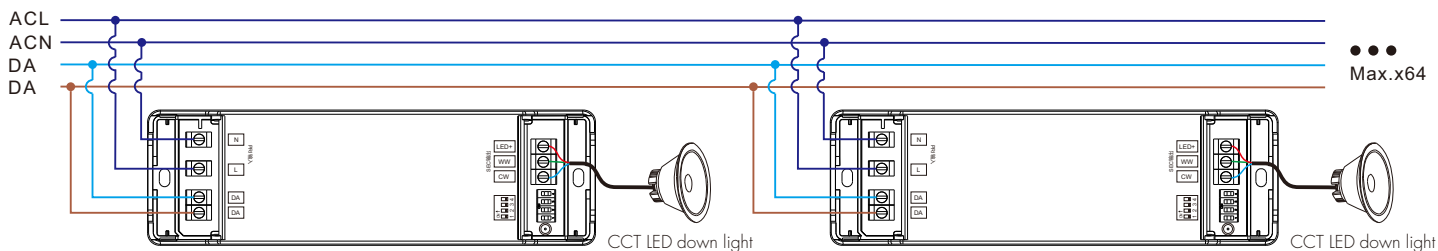
### Technical Parameters

Output	Output Voltage	10~42VDC
	Max Output Voltage	48VDC
	Output Current	100-450mA
	Output Power	Max. 12W
	Dimming Range	0~100%, dimming depth:0.1%
	PWM Frequency	4KHz
	Current Accuracy	±5%
	Ripple & Noise	<5%(Maximum current non dimming state)
Input	Input Voltage Range	100~240VAC
	Frequency Range	50/60Hz
	Efficiency(TYP)	>83% (350mA at full load)
	Input Current	≤0.15A/115VAC, ≤0.08A/230VAC
	Power Factor	>0.95/115VAC, >0.9/230VAC
	THD	<12% / 230VAC(at full load)
	Anti Surge	1:N: 1.2KV
	Inrush Current	Cold start8A, 135us duration(50% peak) / 230VAC
	Leakage Current	< 0.6mA/230VAC
	Standby Power/No Load Power	<0.5W(DIMMING OFF)
Dimming Interface	DALI dimming	Voltage range: 9.5-22.5V, typical 16V, interface current consumption: 1.8mA
Protection	Over Load Power	Current decrease or Hiccup, recovers automatically after fault condition is removed
	Short circuit protection	Output shortcircuit, LED indicator flash prompt, PWM intermittent shutdown output, a long time shortcircuit, the system will completely shut down the LED output, need to repower on activation
	Open circuit protection	Output open circuit, LED indicator slow flash prompt, PWM intermittent shutdown output, troubleshooting, lamps and lanterns back to normal lighting
	Over temperature protection	Current decrease when PCB temp>100°C, recovers automatically after fault condition is removed
Environment	Working Temperature	-20°C~50°C
	Tcase Max	80°C
	Working Humidity	20%~90%RH, non-condensing
	Storage Temp/Humidity	-40°C~80°C, 10%~95%RH
	Temperature Coefficient	±0.03%/°C (0-50%)
	Vibration Resistance	10-500Hz, 2G, 6min/cycle, X,Y,Zaxes/2min
Safety&EMC	Security Specifications	CE-LVD: EN 61347-2-13:2014/A1:2017, EN 61347-1:2015, EN 62493:2015
	Withstand Voltage	I/P-O/P: 3750VAC, I/P-DALI: 1500V AC, O/P-DALI: 1500V AC
	Insulation Resistance	I/P-O/P: 100M/500VDC/25°C/70%RHΩ
	EMC Emission	CE-EMC:EN55015,EN61000-3-2,EN61000-3-3
	EMC Immunity	CE-EMC: EN61000-4-2,3,4,5(thunderbolt1KV),6,11
	Certifications	CE, DALI 2.0

LED current selection: 

Output Voltage	10-42V	10-42V	10-42V	10-42V	10-40V	10-34V	10-30V	10-26V				
Output Current	100mA	150mA	200mA	250mA	300mA	350mA	400mA	450mA				
Output Power	1-4.2W	1.5-6.3W	2-8.4W	2.5-10.5W	3-12W	3.5-11.9W	4-12W	4.5-11.7W				

## Wiring Diagram



### DALI dimming mode

After installation according to the wiring diagram of DALI dimming application, the dimming power supply receives any DALI command to enter the DALI dimming operating mode.

### Power-on level

When the driver is in DALI dimming mode, the factory default level after each power-on is the brightest. (The recommended setting for the default factory power-on level of the DALI-2 driver is the brightest in the DALI-2 standard.)

The power-on level can be set through the DALI configuration tool or DALI application controller during installation, and can be set to memory or fixed any brightness (such as off, darkest, 30%, 50% etc.).

The dimming curve can be selected by DALI configuration. The default is logarithmic dimming curve.

## Installation note

1. This product must be installed and adjusted by a qualified professional.
2. This product is non-waterproof. When installed outdoors, please ensure it is mounted in a water proof enclosure.
3. LED driver should keep a certain distance from the heating stuff (such as the luminaries radiator).  
The installation interval between the product and the product is recommended to be 1.5cm, so as not to affect the service life due to poor heat dissipation.
4. Before you power on the product, please make sure all the wiring is correct in case of incorrect connection that may cause a short circuit and damage the components, or trigger a accident.
5. If a fault occurs, please do not attempt to fix the product by yourself. If you have any questions, please contact us in time.