# 7W Mini DALI DT6 NFC LED Driver(Constant Current)



Important: Read All Instructions Prior to Installation

## **Function introduction**

Wire Gauge: Input: 0.75-1.5mm² Output: 0.5-0.75mm²



## **Product Data**

	LED Channel	1							
	DC Voltage	2-20V							
	Current	350-700mA via NFC tool; Min.current gear lower to 0.1mA, default 350mA							
Output	Current Accuracy	±3%( ±1%@Certain full load) @ full load							
	Rated Power	Max. 7W							
	Voltage Range	220-240VAC/220-240VDC							
	Absolute Voltage Range	196-264VAC/196-264VDC							
	Frequency Range	0/50/60Hz							
	Power Factor (Typ.)	> 0.9 @ 230VAC Full load							
	Total Harmonic Distortion (Typ.)	THD≤ 15% (@ full load / 230VAC)							
Input	Efficiency (Typ.)	> 70% @ 230VAC full load							
	AC Current (Typ.)	0.1A Max.							
	Inrush Current (Typ.)	Max. 3.18A at 230VAC; 22µs duration							
	Leakage Current	< 5mA /230VAC							
	Standby Power Consumption	< 0.5W							
	Anti Surge	L-N:1KV							
	Dimming Interface	DALI Device Type 6 (DALI consumption < 2mA)/ AC Push							
Control	Dimming Range	0.01%-100%@ Max current							
Control	Dimming Method	Amplitude/CCR dimming							
	Dimming Curve	Linear/ Logarithmic optional							

	Short Circuit	Yes, remove the fault conditions and re-power the device.						
Protection	Over Current	Yes, remove the fault conditions and re-power the device.						
	Over Temperature	Yes, remove the fault conditions and re-power the device.						
	Working Temp.	-25°C ~ +45°C						
	Max. Case Temp.	Tc=85℃						
Environment	Working Humidity	10% ~ 95% RH non-condensing						
	Storage Temp. & Humidity	-40°C ~ +80°C, 10% ~ 95% RH						
	Safety Standards	EN61347-1, EN61347-2-13, GB/T 19510.1-2023, GB/T 19510.213-2023						
	Withstand Voltage	I/P-O/P: 3.75KVAC						
Safety & EMC	Isolation Resistance	I/P-O/P: 100M Ohms / 500VDC / 25°C / 70% RH						
	EMC Emission	EN55015, EN61000-3-2, EN61000-3-3, GB 17625.1-2022, GB/T 17743-2021						
	EMC Immunity	EN61547, EN61000-4-2,3,4,5,6,8,11						
Others	MTBF	191350H, MIL-HDBK-217F @ 230VAC full load and 25°C ambient temperature						
others	Dimension	122x23x21mm (L*W*H)						
	Warranty	5 Years						

- In compliance with IEC 62386-101:2014, IEC 62386-102:2014, IEC 62386-207 Ed2
- · Built-in DALI-2 interface, DALI DT6 device
- Dimmable LED driver. Max. output power 7W
- 350-700mA current selectable via NFC program tool. Min.current gear lower to 0.1mA
- DALI Address/Group/Scene setting via NFC program tool.
- Class II power supply, full isolated plastic case
- · High power factor and efficiency
- To switch and dim single color LED lighting luminaries
- Amplitude/CCR dimming, smooth and deep dimming
- Compatible with universal DALI masters that support DT6 commands
- DALI-251/252/253 Enabled, DALI data inside
- Error report function
- LED Driver has Class A sound ratings per Energy-star regulated
- IP20 rating, suitable for indoor LED lighting applications
- 5 years warranty

# Safety & Warnings

- DO NOT install with power applied to the device.
- DO NOT expose the device to moisture.

# Operation

#### With DALI master

1. DALI Address

1 DALI address for 1 channels output are assigned by DALI Master controller automatically, please refer to user manuals of compatible DALI Masters for specific operations.

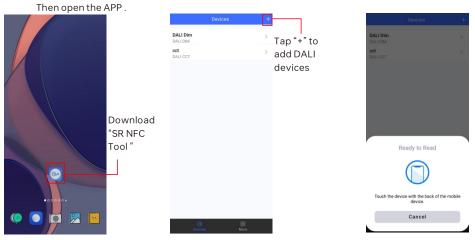
### With NFC Programming devices

### Note

- 1) Do wiring according to the wiring diagram and power on the DALI system.
- 2) Recommend setting parameters without power-on the DALI devices.
- 2) Please make sure your mobile phone has NFC function and enable it.

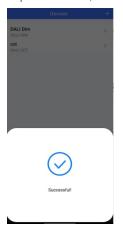
### Working with "SR NFC Tool" APP

Step 1: Download the APP (searching "SR NFC Tool" from App Store and Google Play).



- Note: 1. Please Make sure that you have enabled NFC function with your mobile phone/ tablet .
  - 2. Please Make sure that the "NFC position" is matched.
  - 3. Please do not power on the device before setting.
  - 4. If you can't download "SR NFC Tool". Please contact with us.

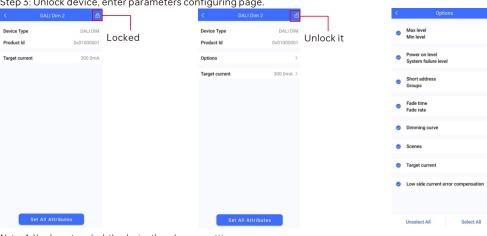
Step 2: Add device, and name it as you wish.





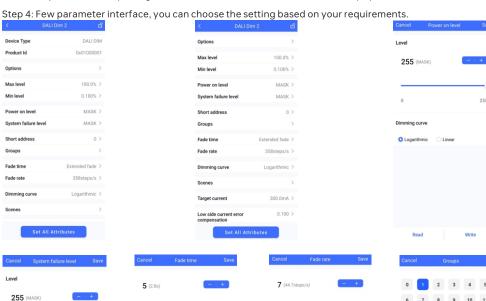


Step 3: Unlock device, enter parameters configuring page.



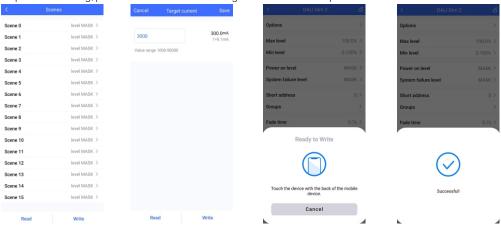
Note: 1. You have to unlock the device then do some settings

2. Only when the corresponding function is selected, the function interface will be displayed.





Step 5: After setting, please save the selected configuration via NFC and power on the device.

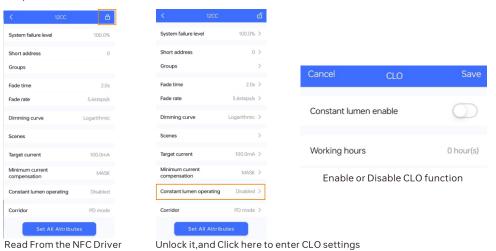


## **Tips**

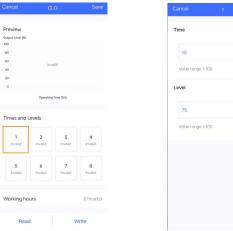
- 1. NFC function doesn't require any power driver.
- 2. Many functions can be configured by NFC. Kindly check your desired functions.
- 3. All of our DALI drivers are in the best performance within our DALI master/ DALI IoT gateway.

## **CLO and CD FUNCTION INSTRUCTION**

### 1. Open APP, and Find the CLO function



### 2.Enter CLO Setting homepage







**Enable CLO function** 

Click "1", and set its time and level

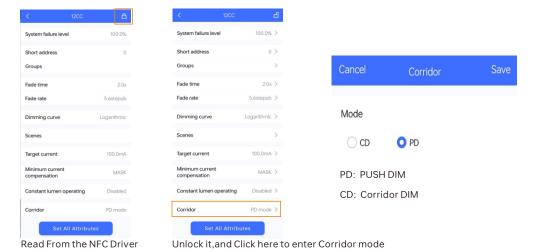
Set your desired time and levels.

Graphic display

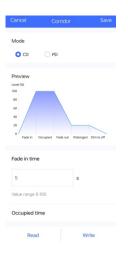
### Tips:

Working hours: Ability to calculate the working hours of a single driver.

### 3.Corridor dim(CD) function



### 4.Enter CD Setting homepage







Set your desired time and levels.

Graphic display

#### Enter CD mode

## Tips:

- 1. You should select either CD mode or PD mode, but not both.
- 2. Under CD mode, you can realize it with normal (3rd party) AC sensor.
- 3. Default mode: PD mode.

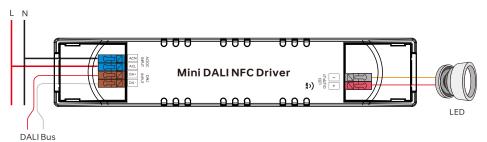
## Additional Remarks



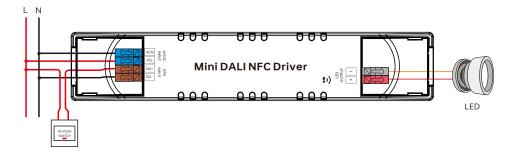
- 1. Please make sure your APP version is 1.0.10 or higher.
- 2. Please make sure NFC driver's firmware is available with CLO / CD functions.

## **Wiring Diagram**

- 1. With DALI bus
  - 1.1 With single color LED luminarie



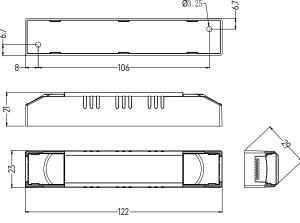
#### 2. With PUSH dimmer



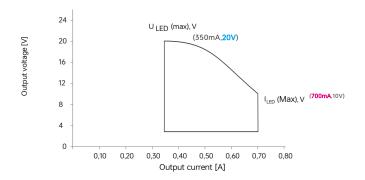
# **AC Push Function**

- 1) Click the button to switch ON/OFF
- 2) Press and hold down the button to increase or decrease light intensity to desired level and release it, then repeat the operation to adjust light intensity to opposite direction. The dimming range is from 1% to 100%.

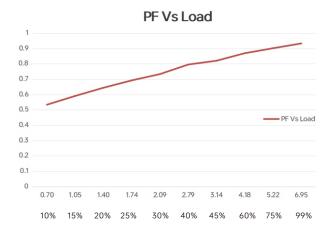
# **Product Dimension**



## **Operating window**

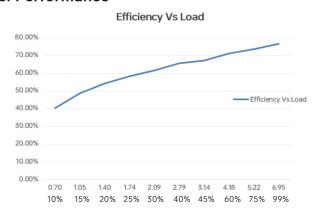


## **Driver Performance**



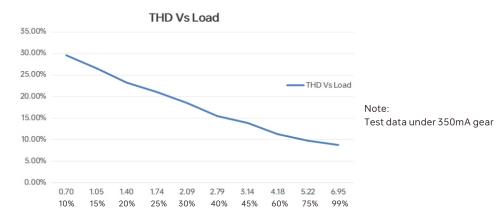
Note: Test data under 350mA gear

## **Driver Performance**



Note: Test data under 350mA gear

## **Driver Performance**



## **Expected Lifetime**

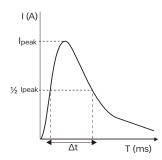
Module Number	Output current	Та	30 °C	40 °C	45 °C	
SRPM-2305N-7CC350-700	350 – 700 mA	Тс	65 ℃	77 °C	85 °C	
SRPM-2309N-7CCT350-700	350 – 700 mA	Lifetime	> 100,000 h	> 80,000 h	> 40,000 h	

The LED driver is designed for a lifetime stated above under reference conditions .

The relation of tc to ta temperature depends also on the luminaire design.

# **MCB Load Quantity**

Module Number	Ipeak	Twidth	Max.quantity of LED Driver per MCB														
			B10	B13	B16	B20	B25	C10	C13	C16	C20	C25	D10	D13	D16	D20	D25
SRPM-2305N-7CC350-700	3.18A	22µs	86	111	137	171	214	100	130	160	200	250	114	149	183	229	286
SRPM-2309N-7CCT350-700	3.18A	22µs	86	111	137	171	214	100	130	160	200	250	114	149	183	229	286



Note:

- 1. Those MCB parameters are based on ABB S200 series circuit breakers.
- 2. For different brands and models of miniature circuit breakers, the quantity of drivers will have difference.
- 3.Please do not exceed the above-mentioned quantity during on-site installation, and the specific load quantity shall be subject to on-site installation.
- 4. When the installation environment temperature of MCBs exceeds 30°C or when multiple MCBs are installed side by side, the number of mounted drives will be reduced, which requires recalculation.
- 5. Type C MCB's are strongly recommended to use with LED lighting

## Update log

Date	Version	Update content	Update by
2024-8-8	V1.0	Initial Version	Romeo

Note: Subject to change without notice. Please contact us if you have any questions.