

SUNRICHER



5 YEAR
WARRANTY

40W

Constant Current Linear LED Driver with DALI-2 NFC

Features of the:
SRPL-2305N-40CC500-1050



Constant
Current



PushDimming
(VAC)



DALI 2 Protocol



In built
applications



NFC
Compatible



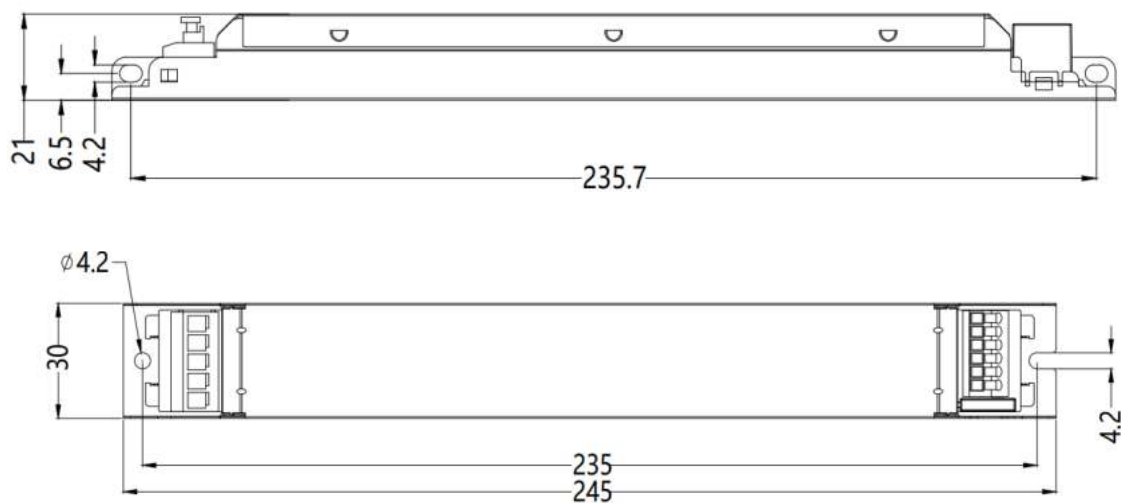
Class II Power
Supply

CE   IP20 SELV

Specification

Model		SRPL-2305N-40CC500-1050
Output	DC Voltage Range	10 ~ 54V
	Rated current	500 ~ 1050mA via NFC setting: Min. current gear lower to 0.1mA. Default 1050mA
	Current Accuracy	±3%@ full load
	Rated power	40W
Input	Voltage Range	220-240VAC
	Frequency range	50/60Hz
	Power Factor (Typ.)	> 0.98@230VAC (Full load)
	Total Harmonic Distortion	THD ≤ 3% (@ full load / 230VAC)
	Efficiency (Typ.)	>87% @ 230VAC full load
	AC Current (Max)	0.3A @ 230VAC
	Inrush Current (Typ.)	Max. 5.62A at 230VAC; 60µs duration
	Leakage current	< 5mA@230VAC
	Standby Power Consumption	<0.5W
Control	Anti Surge	L-N: 2.5KV
	Dimming Interface	DALI Device Type 6 (DALI consumption < 2mA)/ AC Push
	Dimming Range	0.01%-100% @Max Current
	Dimming Method	Amplitude/CCR dimming
Protection	Dimming Curve	Linear/ Logarithmic optional
	Short Circuit	Yes, recovers automatically after fault condition is removed
	Over Current	Yes, recovers automatically after fault condition is removed
	Over Temperature	Yes, recovers automatically after temperature drop
Environment	Working TEMP.	-25°C ~ +60°C
	Max. Case Temp	TC=90°C
	Working humidity	10%-95% RH (non-condensing)
	Storage TEMP humidity	40°C ~ +80°C, 10% ~ 95% RH
Safety & EMC	Safety standards	EN61347-1, EN61347-2-13
	Withstand voltage	I/P-O/P: 3.75KVAC
	Isolation resistance	I/P-O/P: 100MΩ/500VDC/25°C/70% RH
	EMC emissions	EN55015, EN61000-3-2, EN61000-3-3
	EMC Immunity	EN61547, EN61000-4-2,3,4,5,6,8,11
Others	Size	245*30*21 mm (L*W*H)
	Weight	0.25kgs
	Warranty	5 Years
Notes	1. DO NOT select dimming input with power applied to the device. 2. DO NOT install with power applied to device. 3. DO NOT expose the device to moisture.	

Mechanical Specification



Wiring Diagrams & Dimming

DALI



Push Dimming



Operation

With DALI Master:

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

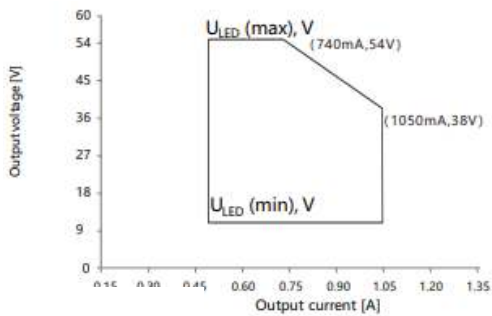
With NFC Programming Devices:

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
3. Please make sure your mobile phone has NFC function and enable it

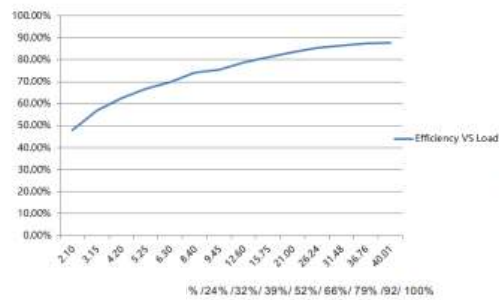
Wiring Diagrams & Dimming

Operating Window



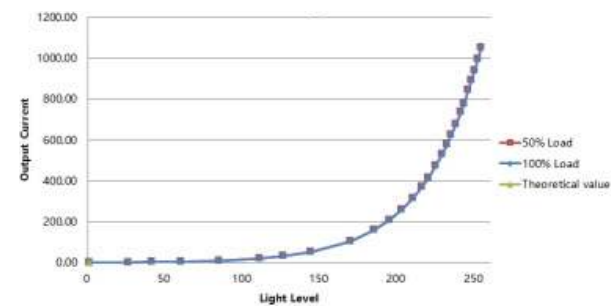
Driver Performance

Efficiency VS Load



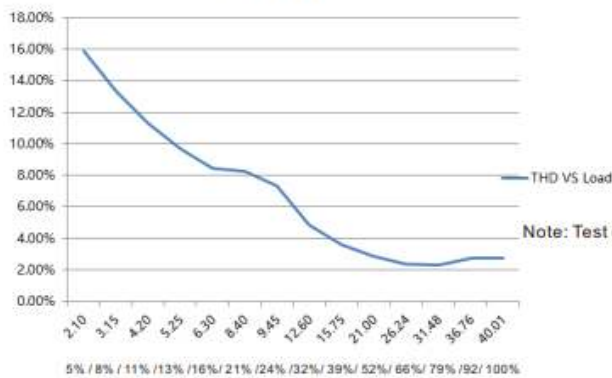
Note: Test data under 1050mA gear

Dimming Curve



Driver Performance

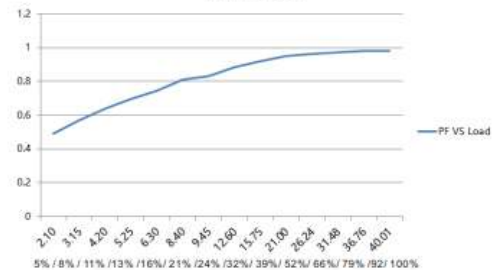
THD VS Load



Note: Test data under 1050mA gear

Driver Performance

PF VS Load



Note: Test data under 1050mA gear

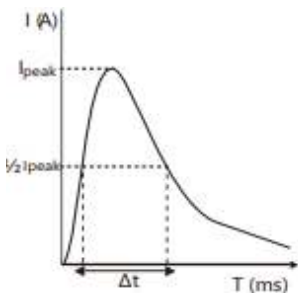
Expected Lifetime

Module Number	Output current	Ta	30 °C	40 °C	45 °C	•••	60 °C
SRPL-2305N-40CC500-1050	500 – 1050 mA	Tc	46 °C	55 °C	61 °C	•••	90 °C(max)
SRPL-2309N-40CCT500-1050	500 – 1050 mA	Lifetime	> 100,000 h	> 100,000 h	> 80,000 h		> 30,000 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 Quality

Module Number	Ipeak	Twidth	Max.quantity of LED Driver per MCB											
			B10	B13	B16	B20	B25	C10	C13	C16	C20	C25	D10	D13
SRPL-2305N-40CC500-1050	5.62A	60µs	30	39	48	60	75	35	45	56	70	87	40	52
SRPL-2309N-40CCT500-1050	5.62A	60µs	30	39	48	60	75	35	45	56	70	87	40	52

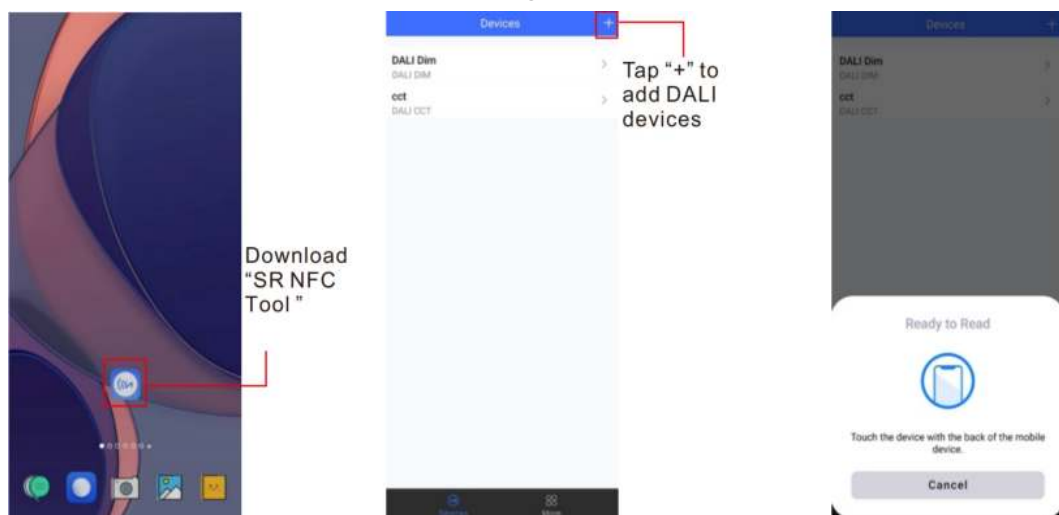


Note:

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

Operation - Working with 'SR NFC Tool' App

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



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. Please If you can't download "SR NFC Tool". Please contact with us
5. Please refer to QR code below

Apple QR Code:



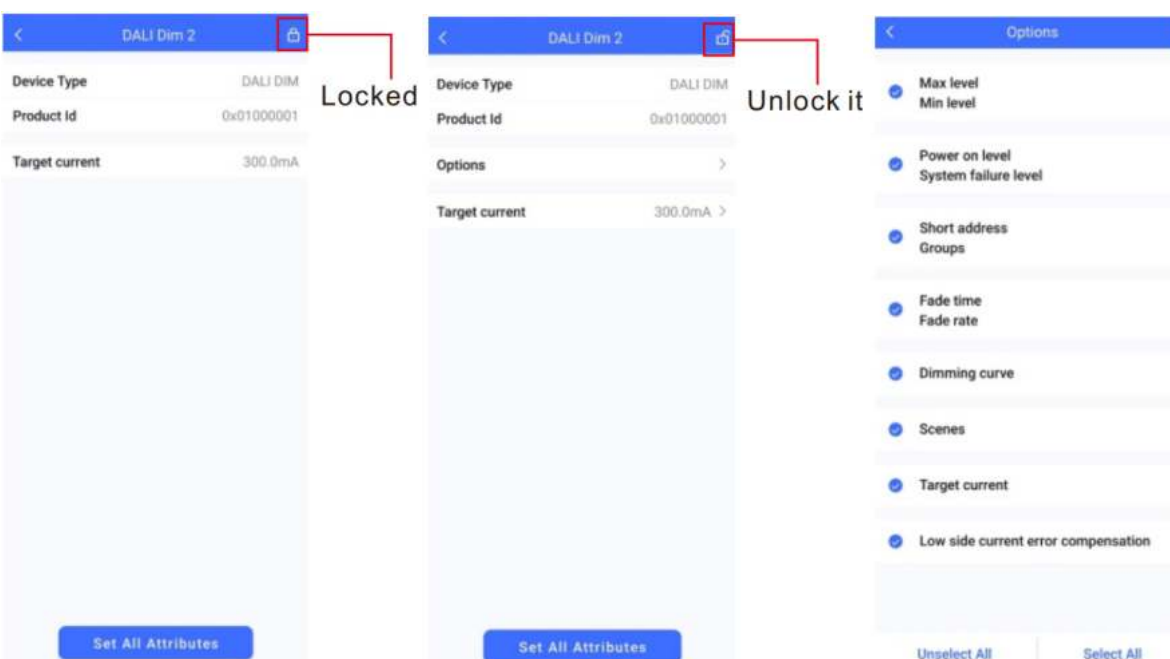
Android QR Code:



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



Step 3: Unlock device, enter parameters configuring page.



Notes:

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.

Operation

Step 4: Few parameter interface, you can choose the setting based on your requirements.

The image displays five sequential screenshots of the DALI Dim 2 configuration interface. Each screen has a blue header with a back arrow, the title 'DALI Dim 2', and a share icon. The first screen shows a list of parameters: Device Type (DALI DIM), Product Id (0x01000001), Options, Max level (100.0%), Min level (0.100%), Power on level (MASK), System failure level (MASK), Short address (0), Groups, Fade time (Extended fade), Fade rate (358steps/s), Dimming curve (Logarithmic), and Scenes. A 'Set All Attributes' button is at the bottom. The second screen shows the 'Level' setting (255 (MASK)) with a slider and 'Dimming curve' options (Logarithmic selected, Linear unselected). The third screen shows the 'System failure level' setting (255 (MASK)) with a slider and 'Dimming curve' options. The fourth screen shows the 'Fade rate' setting (7 (44.7steps/s)) with a slider. The fifth screen shows the 'Groups' setting with a grid of 16 buttons (0-15) and a 'Set All Attributes' button at the bottom.

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

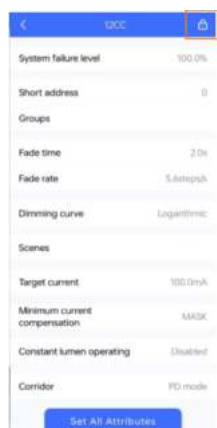
The image displays four sequential screenshots of the configuration process. The first screen shows a list of 16 scenes (Scene 0 to Scene 15), each with a 'level MASK' setting and a 'Read' or 'Write' button. The second screen shows the 'Target current' setting (3000) with a 'Value range 1000-50000' and a '300.0mA ±0.1mA' label. The third screen shows a 'Ready to Write' prompt with an NFC icon and the instruction 'Touch the device with the back of the mobile device.' The fourth screen shows a 'Successful' confirmation with a checkmark icon.

Notes:

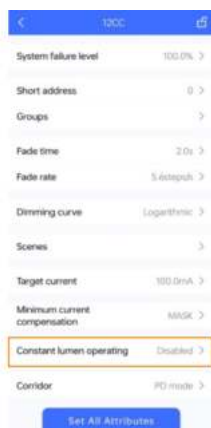
1. NFC function doesn't require any power driver
2. Many functions can be configured by NFC. Kindly check your desired functions.
3. All of our DALI drivers are in the best performance within our DALI master/ gateway

CLO and Corridor DIM(CD) Function Instruction

Step 1: Open APP, and Find the CLO/CD functions



Read From the NFC Driver



Unlock it, and Click here to enter CLO settings



Step 2: Enter CLO Setting homepage



Enable CLO function



Click "1", and set its time and level

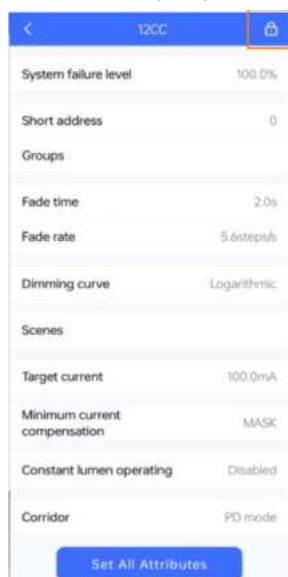


Set your desired time and levels.
Graphic display

Note:

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

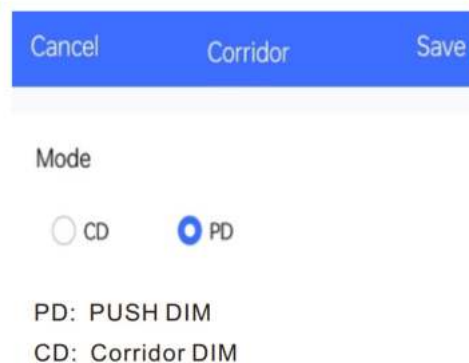
Step 3: Corridor dim(CD) function



Read From the NFC Driver



Unlock it, and Click here to enter Corridor mode



PD: PUSH DIM

CD: Corridor DIM

Operation

Step 4: Enter CD Setting homepage

Cancel Corridor Save

Mode

☒ CD ☐ PD

Preview

Level (%)

Fade in Occupied Fade out Prolonged Dim to off

Fade in time

5 s

Value range 0-100

Occupied time

Read Write

Cancel Corridor Save

Occupied time

120 s

Value range 0-60,000

Occupied level

100 %

Value range 0-100

Fade out time

5 s

Value range 0-100

Prolonged time

40 s

Read Write

Cancel Corridor Save

Prolonged time

60 s

Value range 0-60,000

☐ Infinite

Prolonged level

20 %

Value range 0-100

Dim to off time

5 s

Value range 0-100

Read Write

Notes:

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.

Additional Information

More

Write Consecutively ☐

Advanced >

App Version 1.0.10

Check for Update >

Privacy Policy >

Configurations More

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