

DSI DALI-2

Datasheet

Interface device

DSI to DALI interface



Art. Nr. 22176538



DSI to DALI-2 Interface

Overview

- Compact Converter
- Translation of standard DSI signals (off and dimlevels) to DALI light level commands
- The DALI commands are sent Broadcast on the DALI output side
- DALI output with integrated DALI power supply 25mA (for the supply of ~ 10 DALI ballasts). If additional ballasts are required on the DALI bus, a DALI-2 Expander (Art. No. 89452937) can be used.
- Suitable for installation in electric boxes



Specification, Characteristics

type	DSI DALI-2
article number	22176538
input: L, N	
input type	supply, mains- voltage
marking terminals	L, N
input voltage range	120Vac ... 240Vac
max. input supply current	20mA (@120Vac), 10mA (@240Vac)
input supply frequency	50Hz / 60Hz
max. power consumption	3W
start-up time	250ms
input: DSI, DSI	
input type	DSI control input
marking terminals	DSI, DSI
input voltage range	9,5V ... 22,5V
output: DA+, DA-	
output type	DALI supply
marking terminals	DA+, DA-
output voltage range	12Vdc ... 20,5Vdc
guaranteed output current	25mA
Maximum output current	250mA <i>an additional external bus power supply is not possible</i>
open circuit proof	yes
short circuit proof	yes
insulation data	
impulse voltage category	II
pollution degree	2
rated insulation voltage	250V

insulation DALI-output (DA+, DA-) / supply (L, N) DALI-input / supply (L, N)	reinforced isolation
insulation test voltage DALI-output/mains	3000Vac

environmental conditions

storing and transportation temperature	-20°C ... +75°C
operational ambient temperature	-20°C ... +55°C
rel. humidity, none condensing	15% ... 90%

general data

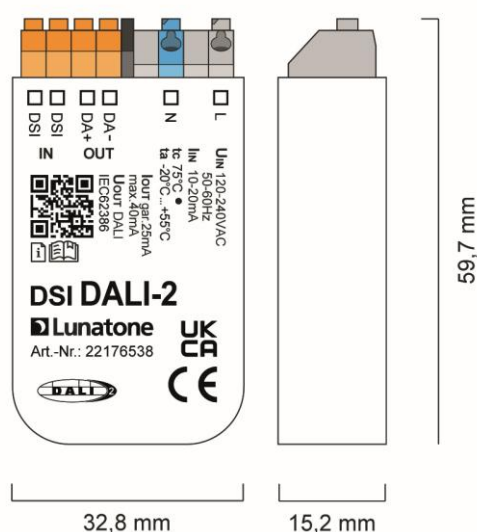
dimensions (l x w x h)	59mm x 33mm x 15mm
mounting	Installation box, integration in class II devices
rated max. temperature tc	75°C
expected lifetime @tc	50.000 h
protection class	II in intended use
protection degree	IP20

terminals:

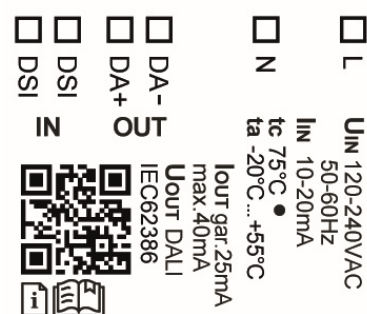
connection type	spring terminal connector
wire size solid core	0,5 ... 1,5 mm ² (AWG20 ... AWG16)
Wire size stranded wired	0,5 ... 1,5 mm ² (AWG20 ... AWG16)
wire size using wire end ferrule	0,25 ... 1 mm ²
stripping length	8,5 ... 9,5mm / 0,33 ... 0,37inch
release of wire	push button

standards:

DALI	EN 62386-101
EMC	EN 61547, EN 50015 / IEC CISPR15
safety	EN 61347-2-11, EN 61347-1
markings	DALI-2, CE, UKCA



dimensions



connection terminals

Installation

- The DSI DALI-2 is intended for back box installation or for integration in protection class II devices. For installation in protection class II devices proper cable relief needs to be ensured.
- The wiring should be carried out as a permanent installation in a dry and clean environment.
- Installation may only be carried out in a voltage-free state of the system and by qualified specialists.
- National regulations for setting up electrical systems must be followed.
- Connect power supply terminals L and N to mains voltage according to the labelling.
- The polarity of the output voltage is marked on the housing (DA+, DA-).
- The device has an integrated DALI bus power supply (25mA). No additional DALI bus power supply may be connected. It must be ensured that the maximum current consumption of the DALI devices on the output side does not exceed the guaranteed output current (25mA). If additional ballasts are required on the DALI output side, a [DALI-2 Expander \(Art. No. 89452937\)](#) can be used

- The DALI line may be routed together with the mains voltage (in one cable or as single wires in a tube)
- The DALI-line must **not** be connected to the mains or extra low voltage systems.
- Only 1 wire may be connected to each terminal. When using double wire end ferrules, the connection capacity of the terminal must be considered.
- The DALI wiring can be realised with standard low-voltage installation material. No special cables are required.
- Wiring topology of the DALI-line: Line, Tree, Star.

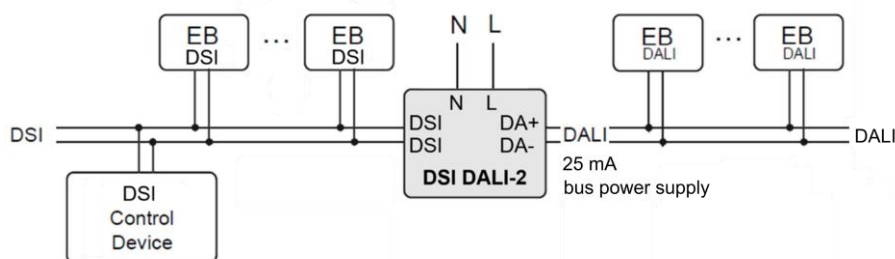


Attention: The DALI-signal is not classified as SELV circuit (Safety Extra Low Voltage). Therefore, the installation regulations for low voltage apply.

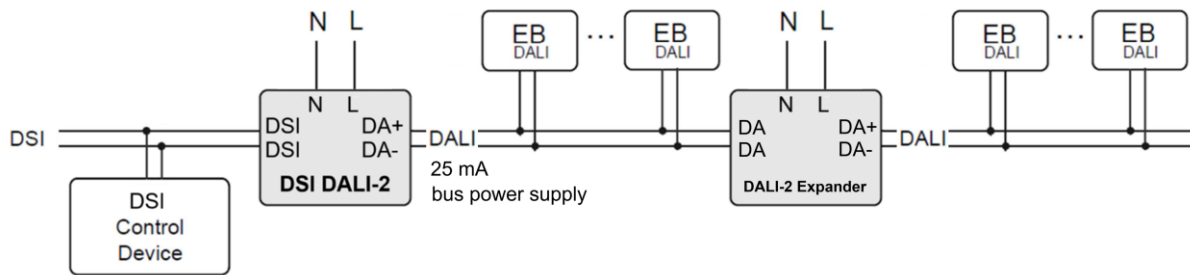


The voltage drop on the DALI line must not exceed 2V at maximum length (300m) and maximum bus load (250mA).

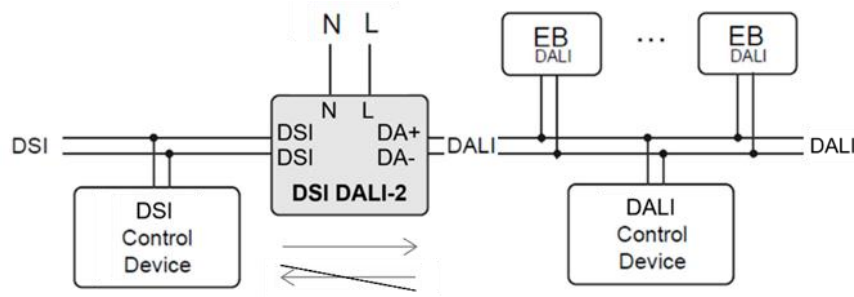
Application Examples



DSI control of DSI and DALI ballasts



Extension of the DALI line with a [DALI-2 Expander \(Art. No. 89452937\)](#)



Control via DSI and DALI: DALI commands are not sent to the DSI side. DSI ballasts will not be controlled via DALI

Commissioning

After installation the DSI DALI-2 is ready for operation

Function

With the DSI DALI-2, standard DSI control signals (off and dim levels) from the DSI input side are translated to DALI light level commands and sent broadcast on the DALI output side.

The direction is unidirectional, from DSI to DALI. DALI control commands on the DALI line will not be translated to DSI.

Purchase Information

Art.Nr. 22176538 : DSI DALI-2, Converter of DSI control signals to DALI with integrated DALI bus power supply (25mA), backbox installation

Additional Information

Lunatone datasheets, manuals and software
<http://www.lunatone.com/en/downloads-a-z/>

Lunatone DALI products
<http://www.lunatone.com/en>

DALI-Cockpit – DALI system configuration tool, free when using a Lunatone interface device
<https://www.lunatone.com/en/product/dali-cockpit/>



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Disclaimer

Subject to change. Information provided without guarantee.
The datasheet refers to the current delivery.

The function in installations with other devices must be tested
for compatibility in advance.