

## DALI-2 IoT

### Datasheet

#### DALI-LAN Interface



Central control module and  
DALI-LAN Interface

Art.Nr. 89453886  
GTIN: 9010342013607

# DALI IoT Central Control Device & Interface

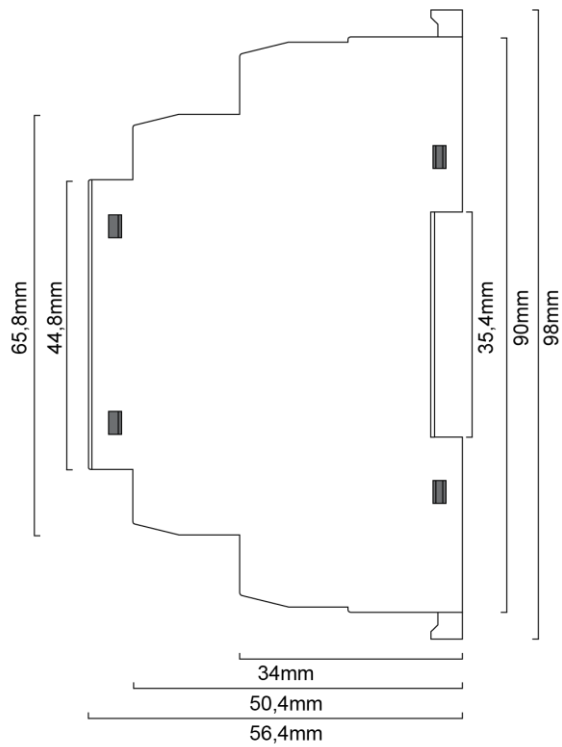
## Overview

- Interface module to connect a DALI network and a LAN network
- IoT (LAN) interface to DALI: addressing, status queries, monitoring, etc. of DALI ballasts
- RESTful API endpoints and WebSocket with JSON syntax, encrypted (optionally unencrypted) for custom integrations
- Connect and control separate DALI circuits via several DALI gateways via LAN
- Integration with local network-based third-party systems.
- Node-RED support: Lunatone Node-RED module for simple integration in Node-RED automations (supported from firmware version 1.7.0 on)
- DIN rail mounting
- Supply 24VDC (e.g. : with 24V / 300mA Art.Nr. 24166012-24HS)

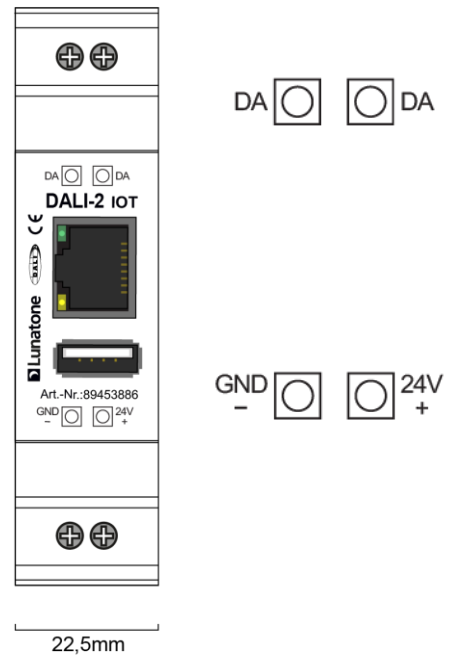


## Specification, Characteristics

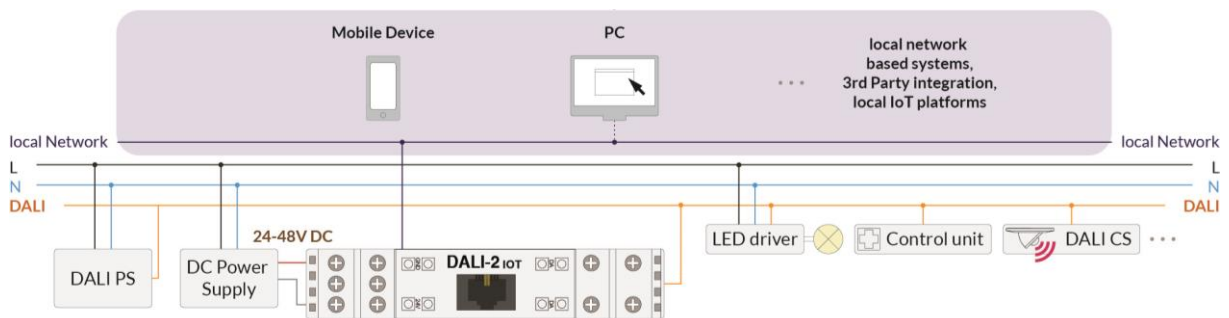
type	DALI-2 IoT
article number	89453886
GTIN	9010342013607
<b>electrical data:</b>	
power supply	24VDC
typ. current consumption	90 mA
Ethernet	1xEthernet 10/100Base-T, electrically isolated, isolation voltage 1500VAC, RJ45-connector
DALI	1 x DALI, electrically isolated
<b>technical data:</b>	
storage and transportation temperature	-20°C ... +75°C
operational ambient temperature	-20°C ... +60°C
protection class	IP20
max. connecting wire cross section	2,5 mm <sup>2</sup>
mounting	DIN rail
dimensions	98 x 23 x 56 mm



dimensions



connection plan




typical application


## Installation

- supply voltage 24VDC - the DALI-2 IoT device requires a 24 V supply, which is connected to the terminals provided for this purpose (suitable power supply unit: PS 24V, 300mA, article nr.: 24166012-24HS).
- The DALI-2 IoT is connected directly to the DALI bus. The supply of the DALI circuit must be ensured by a suitable DALI bus power supply (e.g. DALI PS article nr.: 24033444).
- The connection to the DALI terminals can be made regardless of polarity. The bus

input is protected against overvoltage (mains voltage).

- 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.
- The DALI wiring can be realized with standard low-voltage installation material. No special cables are required.
- Only 1 wire may be connected to each terminal. When using double wire end ferrules, the connection capacity of the terminal must be considered.

 **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).

## Functionality

The DALI-2 IoT Gateway is an interface for connecting the DALI system with smart devices to the Internet of Things (IoT) via the local network.

Thereby, a simple implementation of an intelligent system is possible with the DALI-2 IoT gateway. Devices can be controlled and monitored via smartphones, PCs, etc.

The DALI-2 IoT includes functionalities such as a time switch, circadian control and a sequencer (to recall sequences of DALI commands).

Basic services and API documentation are available at [http://<IP\\_ADDRESS of the DALI-2 IoT>/docs](http://<IP_ADDRESS of the DALI-2 IoT>/docs).

The API documentation and IoT functionalities are further explained in the manual: [DALI IOT API documentation](#)

## Network Connection

The DALI-2 IoT is configured to automatically obtain an IP address using the DHCP protocol. If the DALI-2 IoT is unable to reach a DHCP server (e.g. when the DALI-2 IoT is directly connected to a PC) it falls back to the static IP address 169.254.0.1, and the subnet mask 255.255.0.0. after 1min.

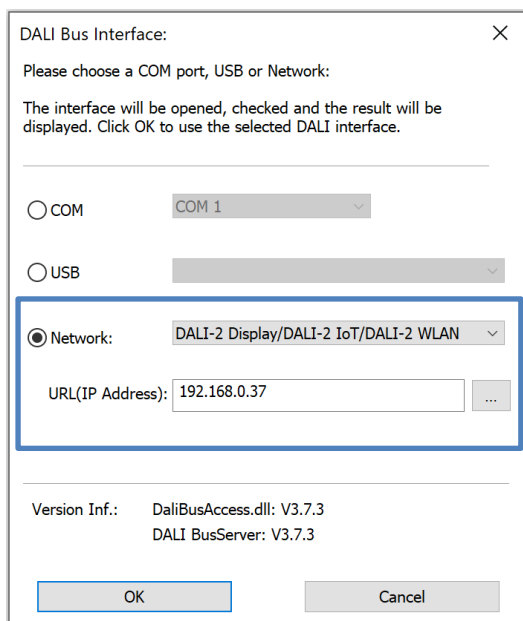
If the DALI-2 IoT device is in a network and receives its IP address via DHCP, the IP-address can be determined using a "Discovery" protocol: The DALI-2 IoT listens to UDP packets on port 5555, containing discovery and reacts by sending back {"type": "dali-2-iot"}. For detailed information see the DALI-2 IoT-API manual: [DALI IOT API documentation](#)

Network settings can be changed via the API documentation ([http://<IP\\_ADDRESS of the DALI-2 IoT>/docs](http://<IP_ADDRESS of the DALI-2 IoT>/docs)).

## DALI Cockpit

The DALI-2 IoT Gateway can be used as a DALI Cockpit Interface (Cockpit Version 1.38 or higher), for configuration of the DALI devices on the connected DALI bus. The Windows PC from which the DALI Cockpit is used and the DALI-2 IoT need to be in the same local

network. When selecting the DALI bus interface in the DALI Cockpit: choose the option "Network" and "DALI-2 Display, DALI-2 IoT, DALI-2 WLAN" and specify the device's IP address. If the IP address is not known, the network can be searched for devices using the button next to the IP address input field:



## Node RED

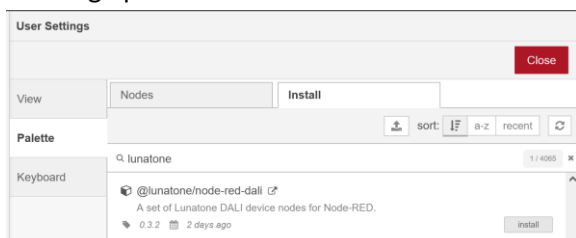
<https://nodered.org/>

The Lunatone Node -RED module:

<https://flows.nodered.org/node/@lunatone/node-red-dali>

can be used for integration of the DALI-IoT (firmware 1.7.0 and higher) and connected DALI system in Node RED automations.

The Lunatone module can be added like other modules in the menu "User Settings"> "Manage palette" > "Install":



## Purchase Order Information

**Art.Nr. 89453886:** DALI-2 IoT, DALI – LAN interface.

### Accessories:

**Art. Nr.: 24166012-24HS,** 24VDC/300mA power supply, DIN rail

## Additional Information and Equipment

DALI-2 IoT API manual

[https://www.lunatone.com/wp-content/uploads/2021/08/89453886\\_DALI2\\_IOT\\_API\\_Dokumentation\\_EN\\_M0023.pdf](https://www.lunatone.com/wp-content/uploads/2021/08/89453886_DALI2_IOT_API_Dokumentation_EN_M0023.pdf)

DALI-Cockpit – free configuration tool from Lunatone for DALI systems

<https://www.lunatone.com/en/product/dali-cockpit/>

Lunatone DALI products

[www.lunatone.com/en/](http://www.lunatone.com/en/)

Lunatone datasheets and manuals

[www.lunatone.com/en/downloads-a-z/](http://www.lunatone.com/en/downloads-a-z/)

## Contact

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## Disclaimer

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

The compatibility with other devices must be tested in advance to the installation.