Lunatone

DALI USB

Datasheet

DALI USB Interface

Communication interface between PC and modules in a DALI lighting system

USB: Art. Nr. 24138923
USB-Mini: Art. Nr. 24138923DO
wDALI USB: Art.Nr. 24138923-wD
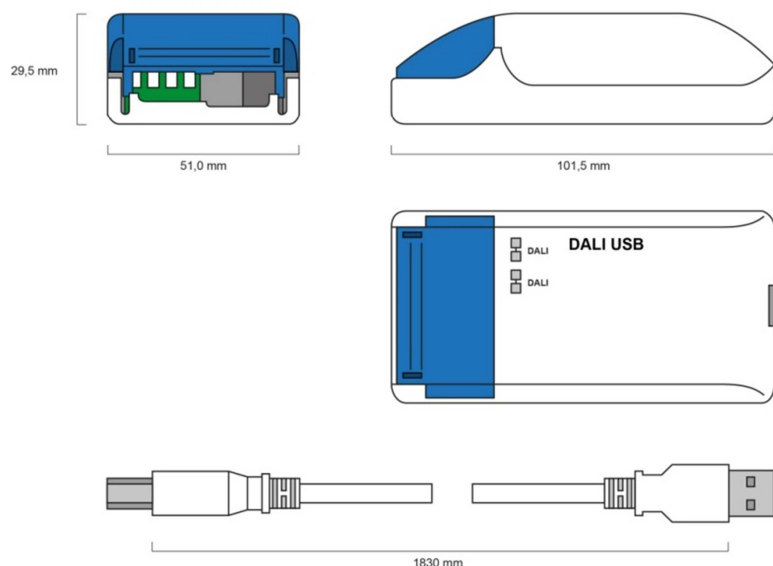
DALI USB Interface

Overview

- Communication interface between DALI systems and PC applications
- bidirectional data transfer
- The DALI USB is generally applicable to address and configure DALI components. It can be used for status requests and parameter setting as well.
- Standard DALI protocol and various extended DALI protocols are supported
- monitoring of DALI-communication
- USB and DALI-line are electrically isolated
- supply via DALI-line and USB interface
- The „DALI Cockpit" configuration and monitoring software is for free
- 3 types available
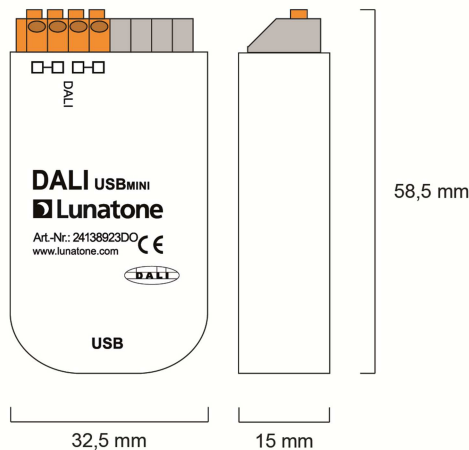- Double DALI terminals – the DALI signal line is connected through

Specification, Characteristics

Type	DALI USB	DALI USB Mini	wDALI USB
article number	24138923	24138923DO	24138923-wD
geometry LxWxH	102x51x30mm	59x32x15mm	59x32x15mm
housing, installation	mouse	box	box
typ. current consumption	DALI: 6mA, USB: 10mA	DALI: 6mA, USB: 10mA	DALI: 9mA, USB: 40mA
USB connection	1,8m cable	Cable	USB Stick
ambient temperature	0°C-50°C	0°C-50°C	0°C-50°C
protection class	IP20	IP20	IP20

DALI USB :

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DALI USB Mini :

wDALI USB:

DALI USB MINI
🔲 Lunatone
Art.-Nr.: 24138923DO CE
www.lunatone.com
DALI
USB

58,5 mm

32,5 mm   15 mm

wDALI USB
🔲 Lunatone
Art.-Nr.: 24138923-wD CE
DA   DA

58,5 mm

32,5 mm   15 mm
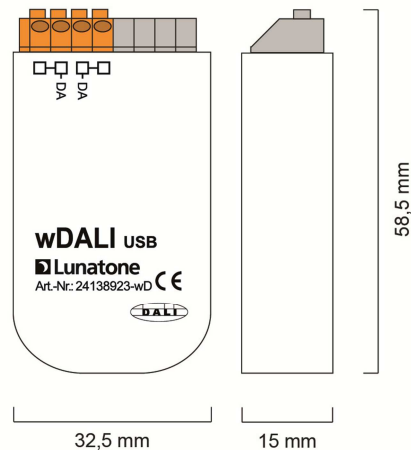
Connection and Electrical Specification

The DALI-line and the USB are electrically isolated. Therefore the DALI USB has to be supplied by the DALI-line (current consumption ~6mA) as well as by USB (current consumption 10mA max). The wireless type requires higher supply currents. The connection to the DALI-line is polarity free and protected against overvoltage of up to 270Vac.
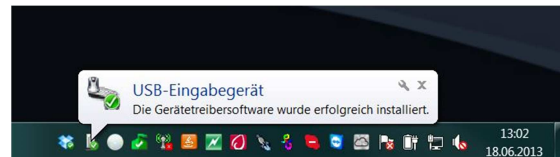
USB, Firmware Update and Windows-Installation

The USB-interface has the following properties:

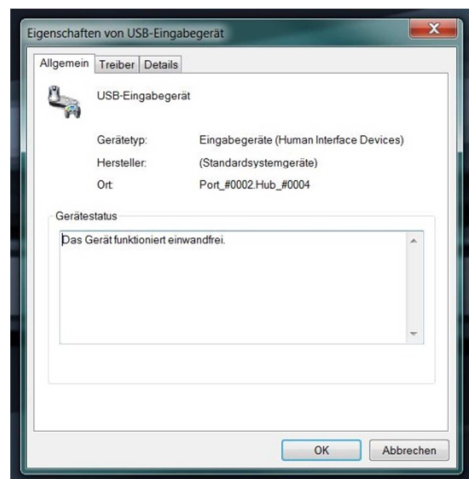| vendor ID	17B5h (Lunatone Industrielle Elektronik GmbH)
product ID	0020h
USB current consumption	10mA max.
speed	full speed USB device (12MBit/s max.)

The DALI-USB firmware will be updated automatically via USB by the

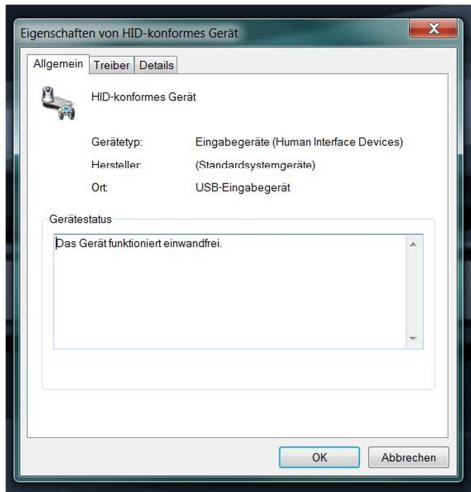DALIBusServer.exe. This program is part of the „DALI-Cockpit"-software-package.

The DALI USB is implemented as USB HID (Human Interface Device).

A driver installation is not necessary due to the windows-integrated built-in support for human interface devices. The DALI USB will be detected by the operating system and all required drivers will be installed automatically.

After the installation process is finished successfully you can find the entry under the node HID (Human Interface Devices) in the device manager.

Supported DALI Specifications and Operating Modes

The DALI USB module supports the following protocols:

- standard DALI (16bit)
- standard DALI (8bit), backchannel
- eDALI, special 25bit Tridonic protocol (24bit data)
- NEMA DALI, 24bit corresponding to NEMA standard publication 243-2005
- 17bit DALI, special DALI-frame used by Helvar
- DSI on DALI Bus (16bit and 8bit), signal on DALI-line is low 10ms before and after sending a DSI-frame

The DALI USB-interface supports the transmission of DALI-commands as well as monitoring functions for DALI-communication. During monitoring mode each DALI-command on the DALI-line that corresponds to the supported protocols will be transmitted to the PC.

Application

The „DALI-Cockpit" software package from Lunatone is a configuration and monitoring tool for DALI-systems. It is free of charge.

For more details check the instruction manuals of DALI USB, DALI-Cockpit and the Lunatone DALI-Tutorial.

A Windows developer kit for DALI USB access is available for software development.

Additional Information and Equipment

DALI-Cockpit – free configuration tool from Lunatone for DALI systems
http://lunatone.at/en/downloads/Lunatone_DALI-Cockpit.zip

Lunatone DALI products
http://www.lunatone.at/en/

Lunatone datasheets and manuals
http://lunatone.at/en/downloads/

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www.lunatone.com

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.