

0-10V to DALI Converter 10mA



Datasheet Interface

Interface for converting 0-10V
control signals to DALI dim levels

Art. Nr. 86468352-xxx

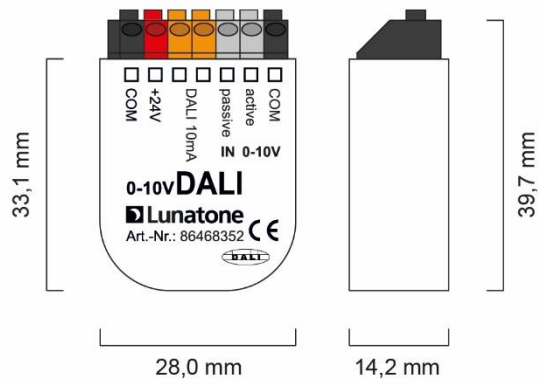
0-10V to DALI Converter Interface

Overview

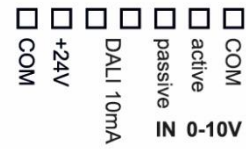
- Compact interface module for the conversion of 0-10V control signals to DALI dim levels
- The interface module provides a DALI power supply for a small DALI-subnet of up to 4 standard DALI ballasts (10mA), up to 64 DALI ballasts controllable with the help of a DALI-Expander
- Passive and active 0-10V input
- The converted value is sent broadcast on the DALI subnet
- A change in the 0-10V input voltage signal (>1%) is used as trigger event.
- The interface module is supplied by a 12-24V power supply
- Various conversion-characteristics available (dimcharacteristic, OFF-function)
- **A galvanic isolation between the ballasts connected to the DALI-output (10mA) and the 0-10V signal input (and 24V supply input) can be realised with the help of a DALI-Expander**

Specification, Characteristics

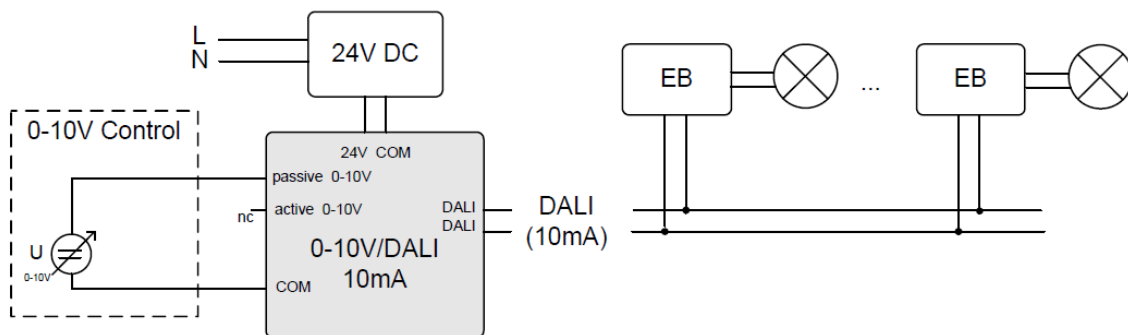
Type	0-10V / DALI Converter
article number	86468352-xxx
electrical data:	
supply voltage	12V-24V DC
typ. current consumption	4mA + current for DALI-subnet
input	0-10V, passive or active
output	DALI I _{max} =10mA
function	signal converter, conversion characteristic can be selected by article number
technical data:	
storing and transportation temperature	-20°C to +75°C
operational ambient temperature	-20°C to 60°C
protection class	IP20
connecting wire cross section	0.5-1.5 mm ²
mounting/housing	back box
recommended cable length to 0-10V control device	50cm
dimensions	40 / 28 / 15 mm



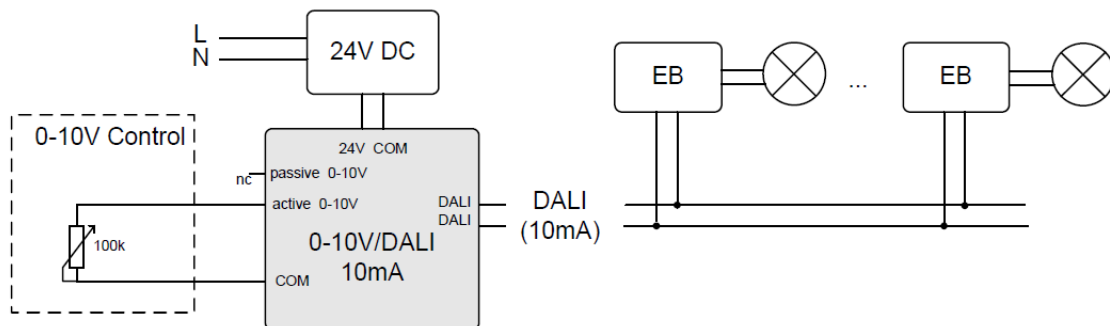
dimensions



connection plan

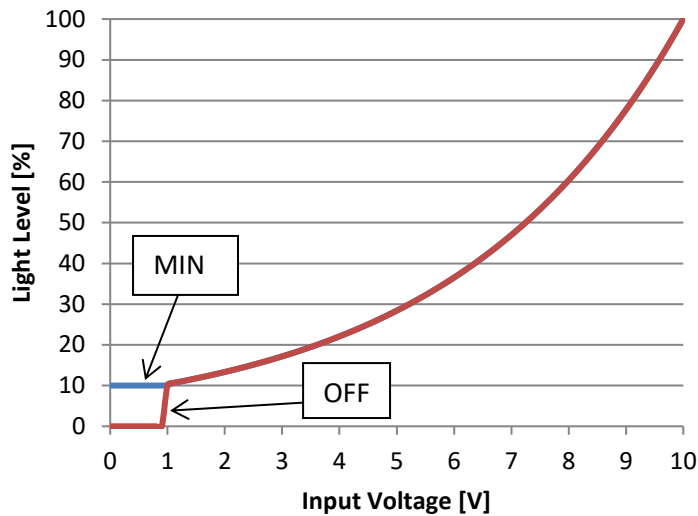


typical application with passive 0-10V input (0-10V control = voltage source)



typical application with 100k potentiometer on active 0-10V input (potentiometer = load)

0-10V to DALI conversion



The light level is the output power of a standard DALI-ballast (IEC62386-102) which is connected to the converter.

Conversion Curve:

The input voltage range of 1V-10V is converted to the light level range of the connected DALI ballast.

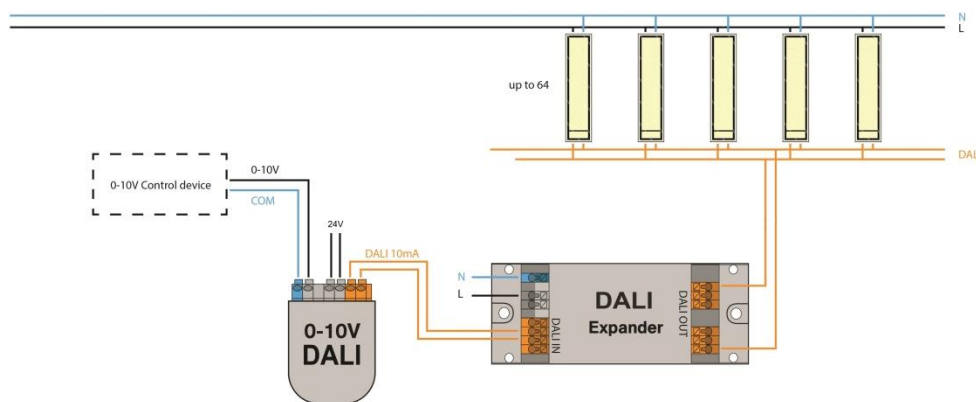
The input voltage is converted to either 1%-100% or 10% -100% light level (depending on the type)

For a better visualisation the characteristics of the 10% types are shown.

MIN/OFF:

Depending on the type the converter behaviour below 1V is different. It is either switched OFF (red characteristic) or the minimum level is recalled (blue characteristic).

Application Example: Controlling up to 64 ballasts with DALI-Expander



Control of 64 DALI-luminaires with a 0-10V to DALI converter with the help of a DALI Expander (ArtNr: 89453847)

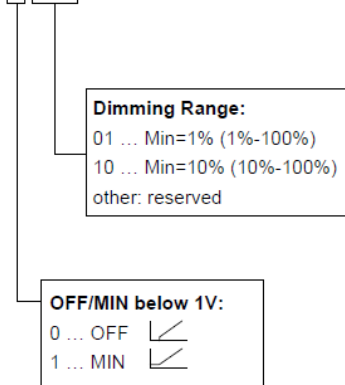
Purchase Information

Art.Nr. 86468352-xxx:

0-10V to DALI converter for the control of a small DALI subnet (broadcast);

Various types differ in dimming range and OFF-function.

Art.Nr.: 86468352 - x x x



In case of orders without detailed specification the delivered parts correspond to the following item number:

Art.Nr. 86468352-001 (OFF, 1%-100%)

Additional Information

Datasheets and manuals

<https://jumitech/produkter>

Contact

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



0-10V to DALI Converter 30mA

Datasheet Interface

Interface for converting 0-10V
control signals to DALI dim levels
with integrated DALI power supply

Art. Nr. 86468352-HS

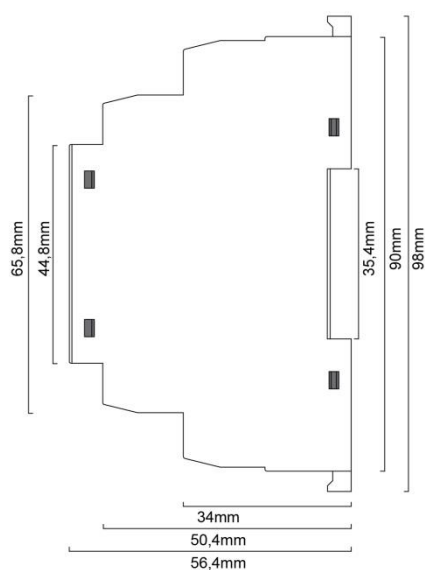
0-10V to DALI Converter 30mA Interface

Overview

- Compact interface module for the conversion of 0-10V control signals to DALI dim levels
- The interface module provides a 30mA DALI power supply for up to 10 standard DALI ballasts, up to 64 ballasts controllable with the help of a DALI-Expander
- passive and active 0-10V input
- The converted value is sent broadcast on the DALI subnet
- A change in the 0-10V input voltage signal (>1%) is used as trigger event.
- The interface module requires a 12-24V power supply (e.g. 24V/300mA Art.Nr. 24166012-24HS)
- Easy set up of the dim characteristic with the help of jumpers
- **A galvanic isolation between the ballasts connected to the DALI-output (30mA) and the 0-10V signal input (and 24V supply input) can be realised with the help of a DALI-Expander**

Specification, Characteristics

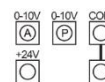
type	0-10V / DALI Converter
article number	86468352-HS
electrical data:	
supply voltage	12V-24V
typ. current consumption	4mA + current for DALI output
input	0-10V, passive or active
output	DALI I _{max} =30mA
function	signal converter, selection of dim characteristic with jumper
mechanical data:	
storing and transportation temperature	-20°C to +75°C
operating ambient temperature	-20°C to 60°C
protection class	IP20
maximum connecting wire cross section	0.5-2.5 mm ²
mounting	din rail
dimensions	98mm x 17.5mm x 56 mm



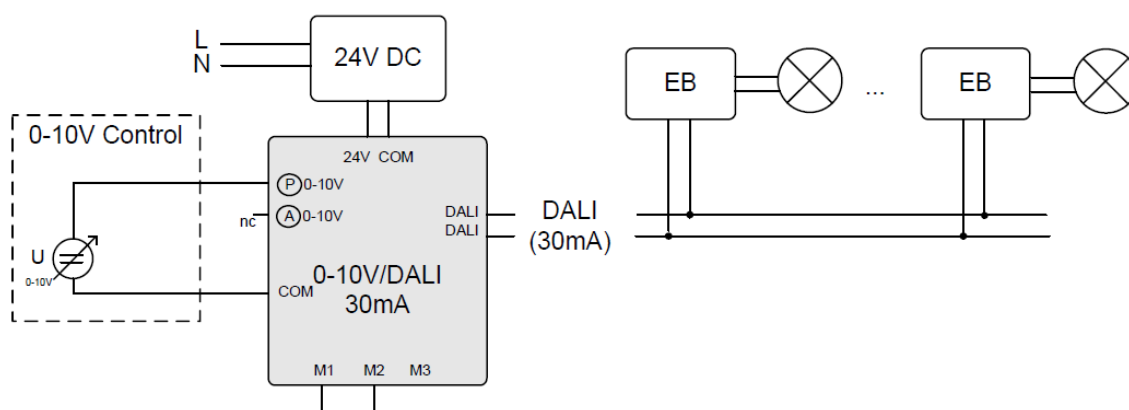
geometry



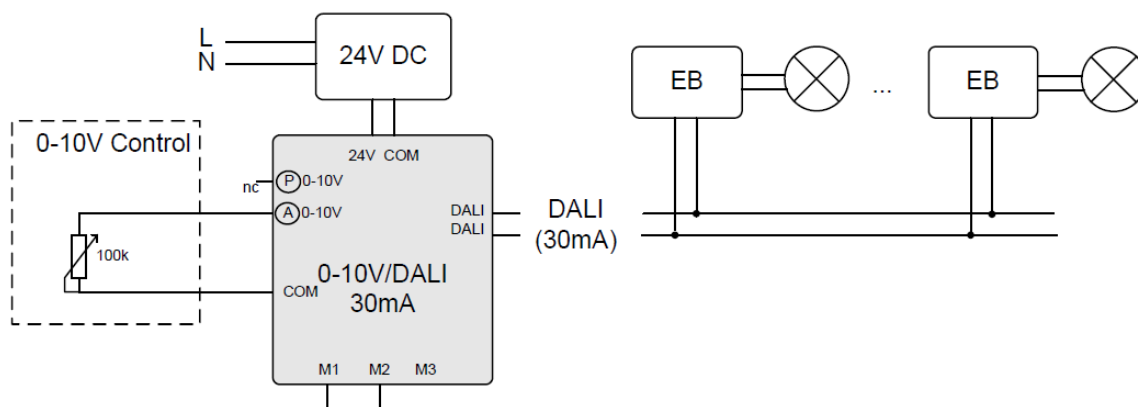
17,5mm



connection plan

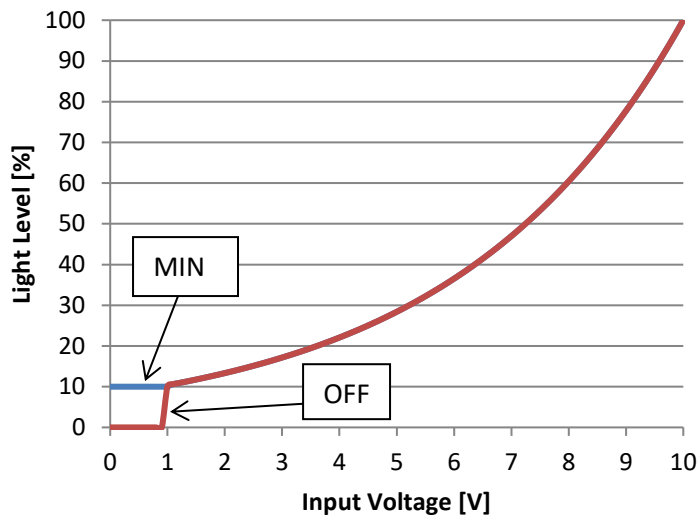


typical application with 0-10V voltage on input P (input passive, 0-10V control = source)



typical application with 100k potentiometer on input A (input active, 0-10V control = sink)

0-10V to DALI conversion



Conversion Curve:

The input voltage range of 1V-10V is converted to the light level range of the connected DALI ballast.

The input voltage is converted to either 1%-100% or 10% -100% light level

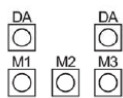
For a better visualisation only the characteristics of the 10% types are shown on the left.

ON/OFF:

As behaviour below 1V the device can either switch OFF (red) or send the minimum level (blue).

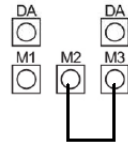
The light level is the output power of a standard DALI-ballast (IEC62386-102) which is connected to the converter.

Dim Characteristic Selection by Jumper on M1 ... M3



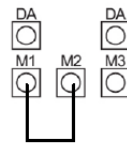
V1:

Dimming: 1%-100%
below 1V: OFF
(red characteristic)



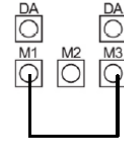
V2:

Dimming: 10%-100%
below 1V: OFF
(red characteristic)



V3:

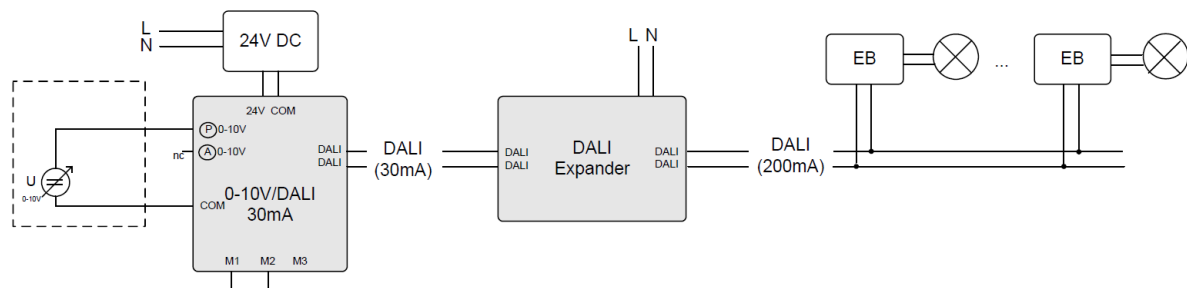
Dimming: 1%-100%
below 1V: Min (1%)
(blue characteristic)



V4:

Dimming: 10%-100%
below 1V: Min (10%)
(blue characteristic)

Application Example: Controlling up to 64 ballasts with DALI-Expander



Control of 64 DALI-luminaires with a 0-10V to DALI converter with the help of a DALI Expander
(ArtNr: 89453847)

Purchase Information

Art.Nr. 86468352-HS: 0-10V to DALI converter, internal 30mA DALI power supply, configurable dim characteristic, active and passive 0-10V input, din rail mounting

Accessories:

Art. Nr.: 24166012-24HS, 24VDC/300mA power supply, dinrail, 1TE

Additional Information

Datasheets and manuals

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Contact

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0-10V to DALI Converter

Datasheet Interface

Module for the control of a DALI-
line with analogue 0-10V signals

Art. Nr. 86468353-1-HS (1 channel)
Art. Nr. 86468353-2-HS (2 channels)
Art. Nr. 86468353-3-HS (3 channels)

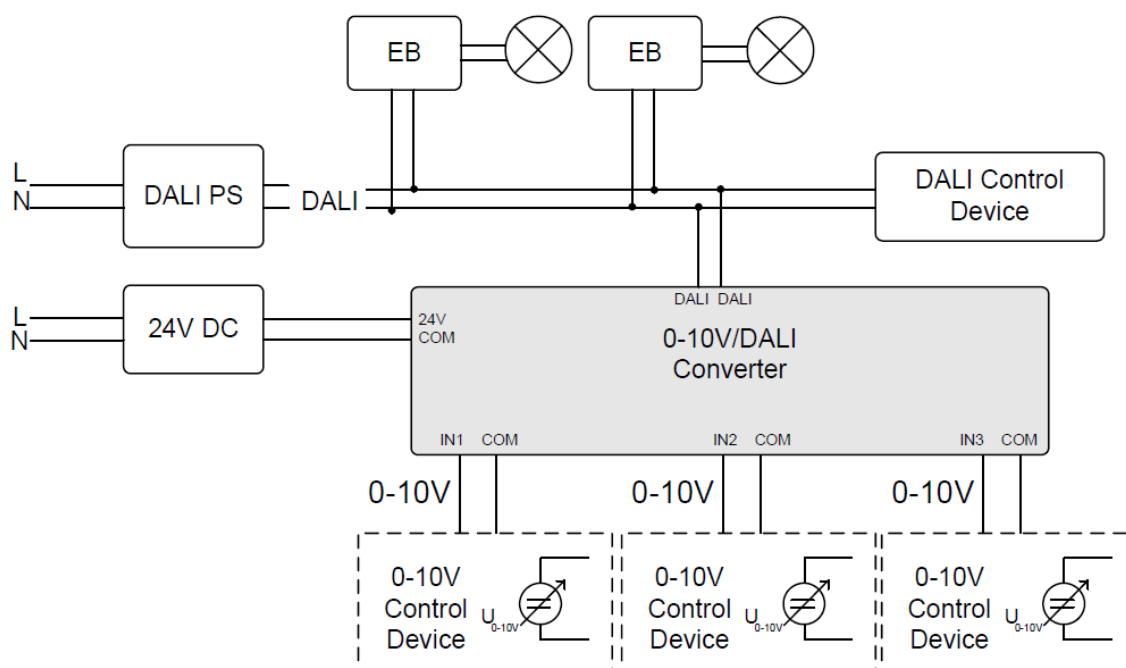
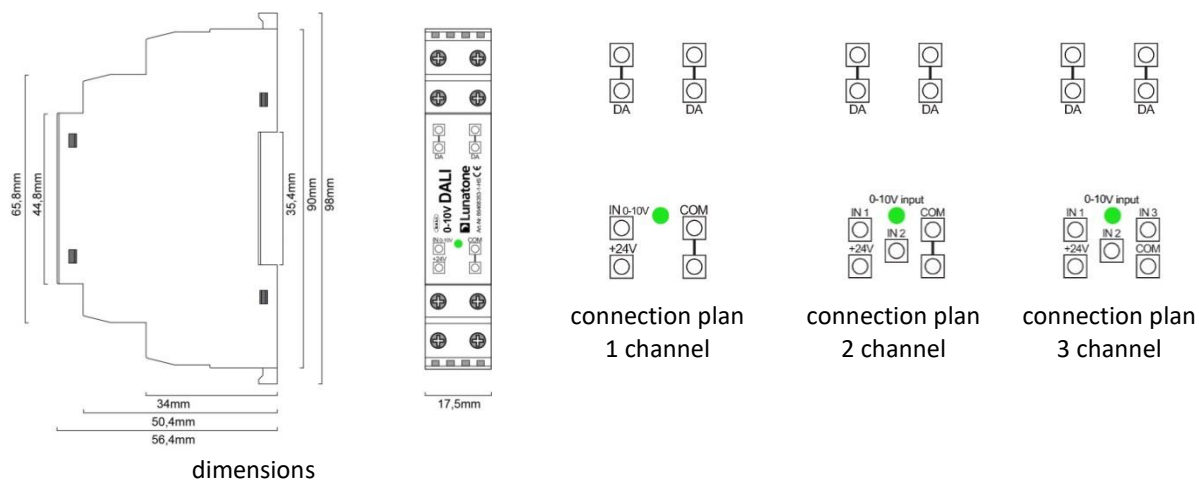
0-10V to DALI Converter Interface

Overview

- Small interface module for the conversion of 0-10V control signals to DALI dim levels
- Devices with 1, 2 and 3 channels available
- The 0-10V voltage is transformed to a DALI dim level and DALI-command Off and sent to the defined effective range on the DALI line
- A change on the 0-10V input voltage (<1%) is used as event trigger
- Supply voltage 12V to 24V DC (e.g. 24V/300mA Art.Nr. 24166012-24HS), multiple devices can be supplied by the same supply voltage
- Configuration of effective range and conversion characteristic (conversion curve and behaviour below 1V input voltage) via DALI-Cockpit and DALI-USB-interface
- Passive input: the module does not supply any voltage to the input, suitable for control with a 0-10V analogue signal (e.g. Siemens LOGO)
- External DALI power supply (e.g. DALI PS) required, multiple devices can be connected to the same DALI-line
- **Galvanic isolation between DALI-Bus and 0-10V input respectively 24V-supply voltage**

Specification, Characteristics

Type	0-10V to DALI Converter		
article number	86468353-1-HS	86468353-2-HS	86468353-3-HS
Electrical data:			
supply	12V-24V DC		
typ. input current 24V	5mA		
input	1x 0-10V / 0,1mA	2x 0-10V / 0,1mA	3x 0-10V / 0,1mA
output	DALI		
Function	converter, function configurable via DALI		
Technical data:			
storing and transportation temperature	-20°C ... +75°C		
operating ambient temperature	-20°C ...+75°C		
protection class	IP20		
connecting wire cross section	up to 2.5 mm ²		
mounting	Din rail		
dimensions	1TE, 98mm x 17.5mm x 56mm		



typical installation 3channel 0-10V to DALI converter

Installation

- Supply: 12V-24V DC (e.g.. 24V/300mA Art.Nr.: 24166012-24HS)
- Galvanic isolation between DALI and 0-10V input / supply
- The 0-10V input voltage has same potential as the supply voltage

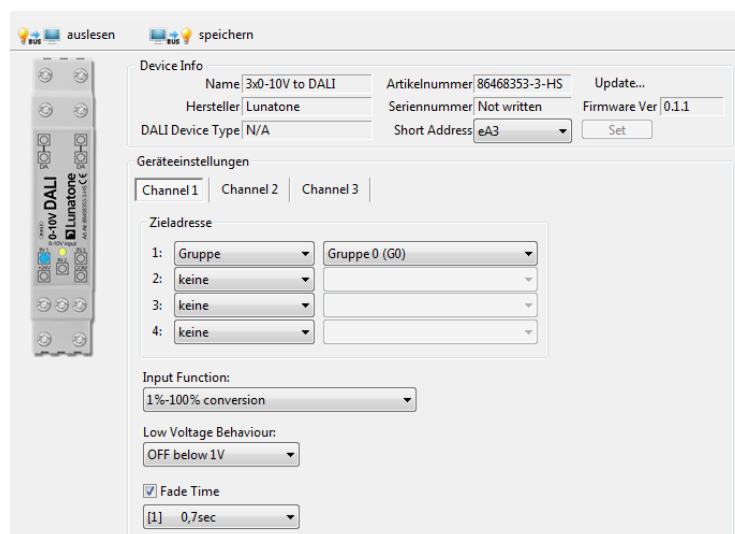
- the connection to the DALI-line is polarity free, the DALI-line is powered by an external DALI power supply

Default Settings and Configuration

- After connecting the device it is ready to use, dependent on the type different factory default settings apply:

Type	1 channel (86468353-1-HS)	2 channel (86468353-2-HS)	3 channel (86468353-3-HS)
Effective Range	Broadcast	channel1: G0 channel2: G1	channel1: G0 channel2: G1 channel3: G2
Dimming range	1%-100%		
Behaviour for input voltage below 1V	OFF		
Fade Time	0.7s		

- Changes on the default settings can be done with the help of the DALI-Cockpit:



0-10V / DALI conversion

conversion characteristic:

The input voltage in the range of 1V-10V is converted into DALI dim levels.

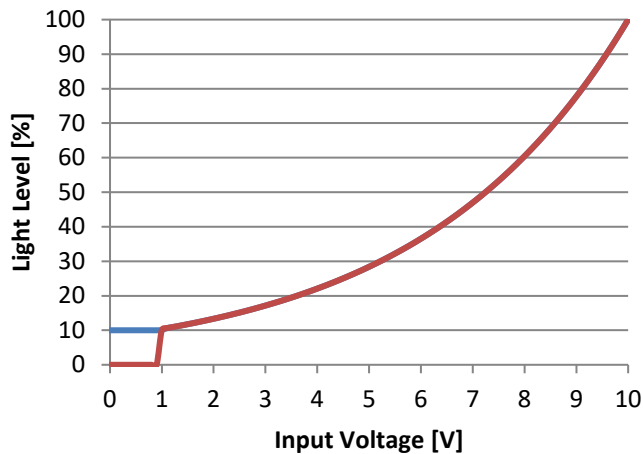
In the DALI-Cockpit the following parameters can be changed:

Light Level Range:

0.1%-100%, 1%-100% or 10%-100%

On/Off-Behaviour:

the behaviour below 1V input voltage:



DALI-command OFF or RECALL MIN

On the left the characteristic with 10%-100% dimming range is shown as an example.

Light level of a DALI-ballast connected to the converter (corresponding to IEC62386-102).

Purchase Order Information

Art. Nr.: 86468353-1-HS: 1 channel 0-10V to DALI Konverter, conversion of a 0-10V analog voltage to a DALI dim level, input passive, 24V DC supply, input and supply electrically isolated to DALI-line, suitable for external DALI power supply, din rail

Art. Nr.: 86468353-2-HS: 2 channel 0-10V to DALI Konverter, conversion of a 0-10V analog voltage to a DALI dim level, input passive, 24V DC supply, input and supply electrically isolated to DALI-line, suitable for external DALI power supply, din rail

Art. Nr.: 86468353-3-HS: 3 channel 0-10V to DALI Konverter, conversion of a 0-10V analog voltage to a DALI dim level, input passive, 24V DC supply, input and supply electrically isolated to DALI-line, suitable for external DALI power supply, din rail

Art. Nr.: 24166012-24HS, 24VDC/300mA power supply, dinrail, 1TE

Additional Information

Datasheets and manuals

<https://jumitech/produkter>

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

<http://lunatone.at/en/downloads/Lunatone-DALI-Cockpit.zip>

Contact

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DALI to 0-10V Interface

Datasheet

DALI to 0-10V Interface



DT5 Converter Module for the
integration of 0-10V dimmer in DALI
lighting systems

Art. Nr. 86458508-AN

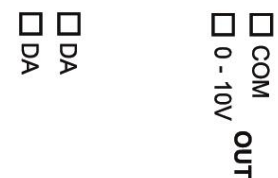
DALI 0-10V Interface

Overview

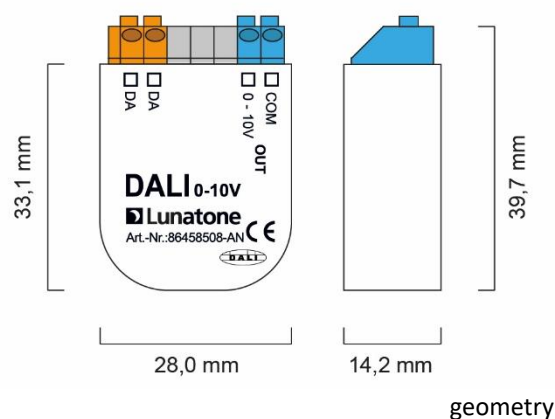
- module converting DALI dimming commands into analogue 0-10V signal (DALI DT5)
- the module is especially designed to operate with drivers with 0-10V control input
- transformation of DALI 8-Bit arc power level into analogue output signal from 0V to 10V
- selection of linear or logarithmic dimming curve (DT5)
- factory default are the default DT5 settings: output range 1-10V, logarithmic dimming curve
- maximum output current of 1mA (current sink)
- The DALI 0-10V must not be connected to the mains. It is supplied directly by the DALI signal line.
- The DALI 0-10V has its own address and can be assigned to DALI groups and scenes
- electrically isolated
- Auto Calibration Mode (can be deactivated or manually triggered via DALI-Cockpit)

Specification, Characteristics

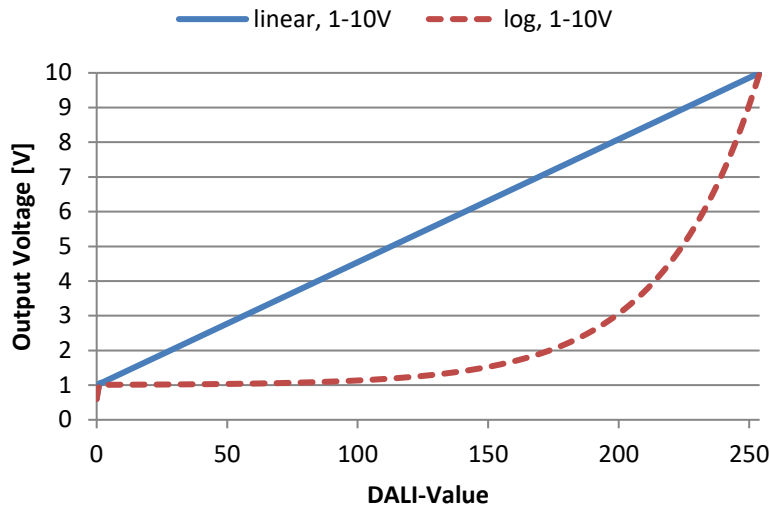
type	DALI 0-10V
article number	86458508-AN
supply	via DALI signal line
typ. current consumption DALI	<4.1 mA
input	DALI
output	0.6V-10V analog voltage 100uA-1mA
geometry (l/w/h)	39.7mm / 28.0mm / 14.2 mm
weight	~10g
storing and operational ambient temperature	-20°C to 75°C
protection class	IP20
connecting wire cross section	0.5-1.5 mm ²



connection plan



geometry



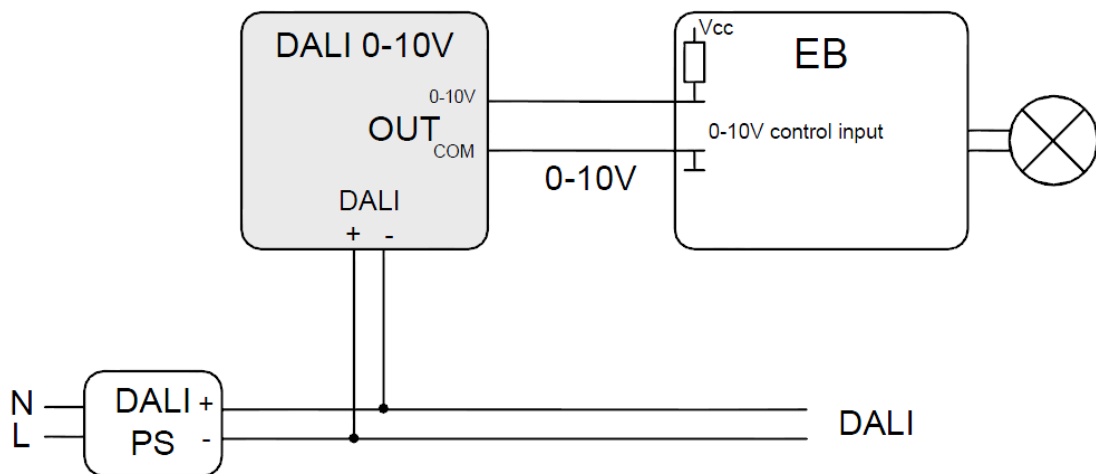
Output range 1-10V:

control characteristic:

DALI 0 (=OFF) correlates with a voltage below and a clear gap to 1V (<0,8V).

DALI 1-254 is transformed to 1V-10V output voltage

— linear
 - - - logarithmic (default setting)



typical structure

Connection

The interface is supplied directly via the DALI signal line. It must not be connected to the mains. The current consumption is typically below 3mA. For supplying components on a DALI line the installation of a DALI power supply (DALI PS) is necessary.

The voltage output supports sinking currents up to 1mA. The terminals allow cross sections of the connection wire from 0.5 to 1.5 mm².

Function

The DALI 0-10V interface converts the desired DALI dim level in a corresponding output voltage. Two types of conversion curves are available (according to DALI DT5). The DALI direct arc power level [1-254] is linearly or logarithmic converted to the output signal [1V-10V]. The relationships are clearly represented by the control characteristic diagram. The maximum output current is 1mA (current sink).

DALI instruction set

The DALI 0-10V module is based on the standard for DALI control gear (IEC 62386-102) and device type 5 extension (IEC 62386-206). With few exceptions the entire instruction set defined by the DALI standard is supported. For changing dimming curve DALI commands for device type 5 are implemented.

Commands and functions referring to the SYSTEM FAILURE LEVEL are not supported. This parameter is used as the dim level that should be applied on the output in case of a DALI line outage. Since the DALI 0-10V is a bus powered device there is no possibility to apply a specific predefined signal on the output without being under power. In the case of a DALI-line outage 100% are applied on the output.

Auto Calibration Mode

On power up the DALI 0-10V converter is evaluating if the calibration values for the output values are still correct or if a recalibration is required. A calibration will last up to 2 minutes. The auto calibration routine can be deactivated and manually triggered via DALI-Cockpit software tool. During the calibration the device does not react to any dimming commands. The DALI Cockpit provides information if the device is in normal operation or if the auto calibration is running.

Purchase Information

article number: 86458508-AN

DT5 interface module for conversion of DALI signals to an electrically isolated 0-10V analog signal

similar components:

DALI 0-10V PWM (Art.Nr. 86458508) with PWM output, galvanic isolation between DALI-input and PWM output

DALI PWM (Art.Nr. 86458508-100) with PWM output (100mA), galvanic isolation between DALI-input and PWM output

DALI 0-10V LE (Art.Nr. 86458508-LE) with analog output, suitable for 0-10V drivers with electrically isolated control input

Additional Information

Datasheets and manuals

<https://jumitech/produkter>

Contact

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DALI to 0-10V Interface

Datasheet

DALI to 0-10V Interface



DT5 Converter Module for the integration of 0-10V drivers with electrically isolated control input in DALI lighting systems

Art. Nr. 86458508-LE
(replaces Art. Nr. 86458508-OS)

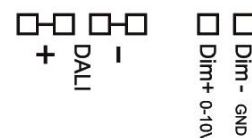
DALI 0-10V Interface

Overview

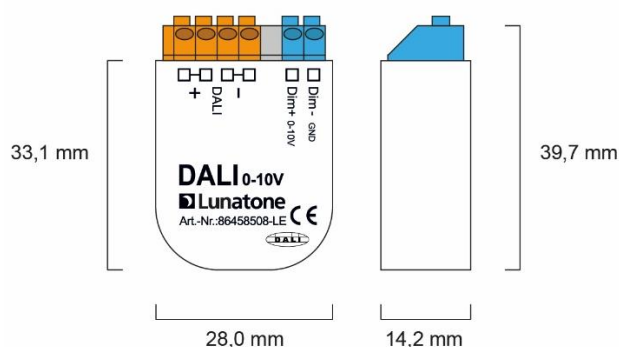
- module converting DALI dimming commands into analogue 0-10V signal (DALI DT5)
- the module is especially designed to operate with drivers with electrically isolated 0-10V control input (e.g. OSRAM 981677 Optotronic OT 80/220-240/24 DIM P and OSRAM 981714 Optotronic OT 240/220-240/24 DIM P)
- transformation of DALI 8-Bit arc power level into analogue output signal from 0V to 10V
- selection of linear or logarithmic dimming curve (DT5)
- output range selectable between 0-10V or 1-10V (DT5)
- manufacturer specific mode for customized output range (modules with firmware 2.0 and higher)
- maximum output current of 1mA (current sink)
- The DALI must not be connected to the mains. It is supplied directly by the DALI signal line.
- The DALI 0-10V has its own address and can be assigned to DALI groups and scenes
- DALI signal line is connected through

Specification, Characteristics

type	DALI 0-10V LE
article number	86458508-LE
supply	via DALI signal line
typ. current consumption DALI	<3 mA
input	DALI
output	0-10V (0%-100%) analog voltage 1mA max. (sinking current)
geometry (l/w/h)	39.7mm / 28.0mm / 14.2 mm
weight	~10g
storing and operational ambient temperature	-20°C to 75°C
protection class	IP20
connecting wire cross section	0.5-1.5 mm ²



connection plan

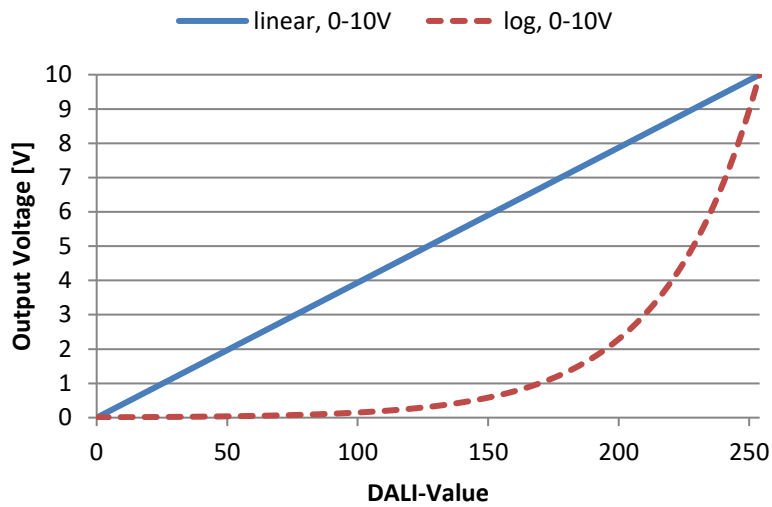


geometry

Remark:

Please keep attention on the connection of the DALI-line: The DALI input is not polarity free!

output range 0-10V:

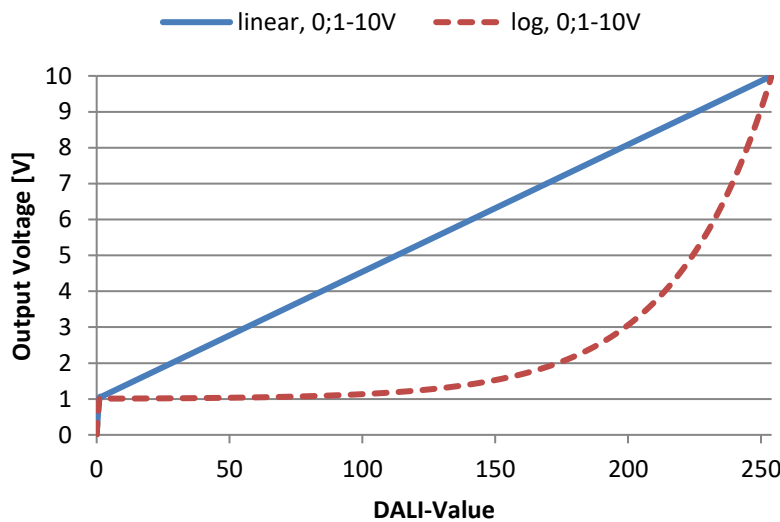


control characteristic:

DALI 0-254 is transformed to 0-100% output voltage

linear
logarithmic

Output range 1-10V:

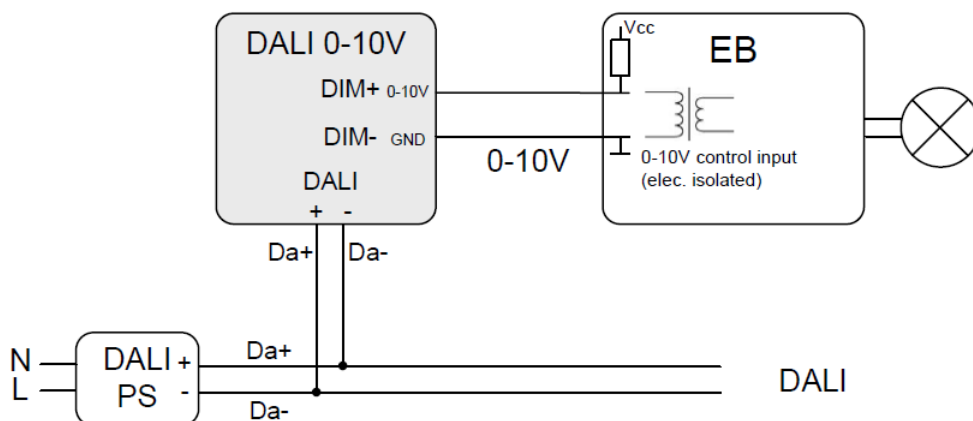


control characteristic:

DALI 0 correlates with a voltage below and a clear gap to 10% (<5%).

DALI 1-254 is transformed to 10%-100% output voltage

linear
logarithmic (factory setting)



typical structure

Connection

The interface is supplied directly via the DALI signal line. It must not be connected to the

mains. The current consumption is typically below 3mA. For supplying components on a DALI line the installation of a DALI power

supply (DALI PS) is necessary. Internally the DALI-terminals are connected through as visualized on the housing.

Please keep attention on the connection of the DALI input. The input is not polarity free!

The voltage output supports sinking currents up to 1mA. The terminals allow cross sections of the connection wire from 0.5 to 1.5 mm².

Function

The DALI 0-10 interface converts the desired DALI dim level in a corresponding output voltage. Two types of conversion curves and output ranges are available (according to DALI DT5). The DALI direct arc power level [0-254] is either linearly converted to the output signal [0%-100%] without or with an additional offset [0%, 10%-100%]. The same output ranges are available in combination with a logarithmic dimming curve. These relationships are clearly represented by the control characteristic diagrams. The maximum output current is 1mA (current sink).

Firmware version 2.0 and higher support a manufacturer specific mode at which the output range is adjustable by the customer. Using this option can be done easily with the help of the DALI Cockpit software tool.

DALI instruction set

The DALI 0-10V module is based on the standard for DALI control gears (IEC 62386-102) and device type 5 extension (IEC 62386-206). With few exceptions the entire instruction set defined by the DALI standard is supported. For changing dimming curve and output range DALI commands for device type 5 are implemented.

Commands and functions referring to the SYSTEM FAILURE LEVEL are not supported. This parameter is used as the dim level that should be applied on the output in case of a

DALI line outage. Since the DALI 0-10V is a bus powered device there is no possibility to apply a specific predefined signal on the output without being under power. In the case of a DALI-line outage 100% are applied on the output.

Purchase Information

article number: 86458508-LE

DT5 interface module for conversion of DALI signals to 0-10V analog signals

Suitable for 0-10V drivers with electrically isolated control input

similar components:

DALI 0-10V PWM (Art.Nr. 86458508) with PWM output, galvanic isolation between DALI-input and PWM output

DALI PWM (Art.Nr. 86458508-100) with PWM output (100mA), galvanic isolation between DALI-input and PWM output

DALI 0-10V AN (Art.Nr. 86458508-AN) with analog output, galvanic isolation between DALI input and 0-10V output, automatic calibration algorithm

Additional Information

Datasheets and manuals

<https://jumitech/produkter>

Contact

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The datasheet refers to the current delivery.

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

DALI 0-10V PWM



Datasheet

DALI to 0-10V PWM interface

DT5 Converter Module for the integration of ballasts with PWM-control input in DALI systems

Art. Nr. 86458508-PWM

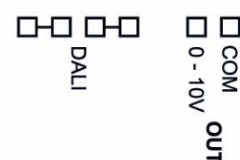
DALI 0-10V PWM Interface

Overview

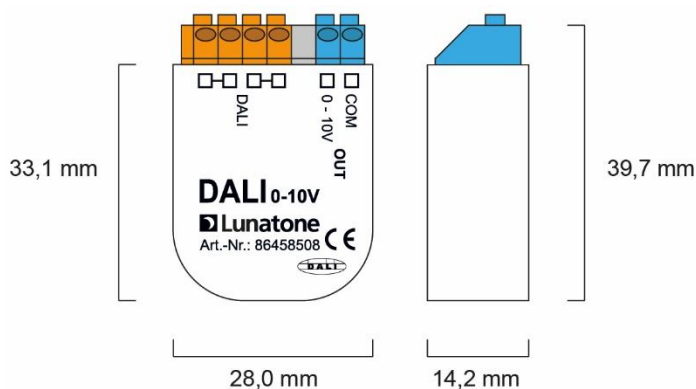
- module converting DALI dimming commands into PWM signal
- easy integration of electronic ballast with PWM control input (e.g. Meanwell HLG, HLN, NPF or LPF series) in DALI lighting systems
- advantage of fail-safe digital signal data communication compared to types with analog output voltage
- transformation of DALI 8-Bit arc power level into PWM output signal (~500Hz) from 0% to 100%
- Selection of linear or logarithmic dimming curve (DT5)
- Output range selectable between 0-100% and 10-100% (DT5)
- Manufacturer specific mode for customized output range (FW2.0+)
- maximum output current of 1mA (current sink)
- The DALI 0-10V is supplied directly by the DALI signal line
- The DALI 0-10V has its own address and can be assigned to DALI groups and scenes
- DALI signal line is connected through
- galvanic isolation between DALI and 0-10V

Specification, Characteristics

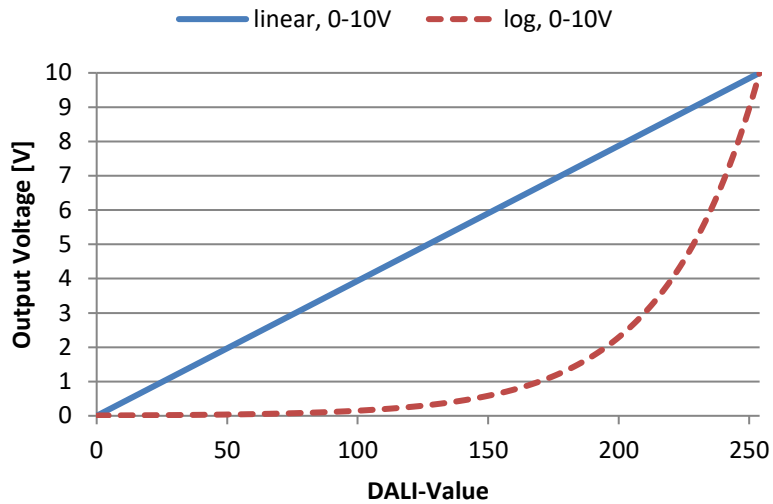
type	DALI-0-10V PWM
article number	86458508-PWM
supply	via DALI signal line
typ. current consumption DALI	3.1 mA
input	DALI
output	488Hz PWM (0%-100%)/1mA current sink
geometry (l/w/h)	39.7mm / 28.0mm / 14.2 mm
weight	~10g
storing and operational ambient temperature	-20°C to +75°C
protection class	IP20
connecting wire cross section	0.5-1.5 mm ²



connection plan



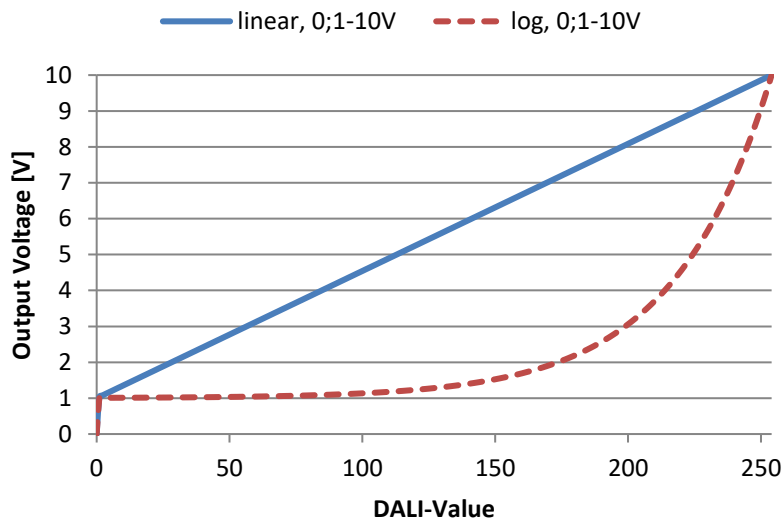
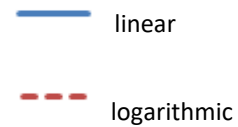
geometry



Output Voltage Range: 0-10V:

control characteristic:

DALI 0-254 is transformed into a 0-10V output voltage (0%-100% PWM pattern).

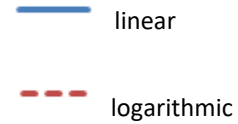


Output Voltage Range: 1-10V:

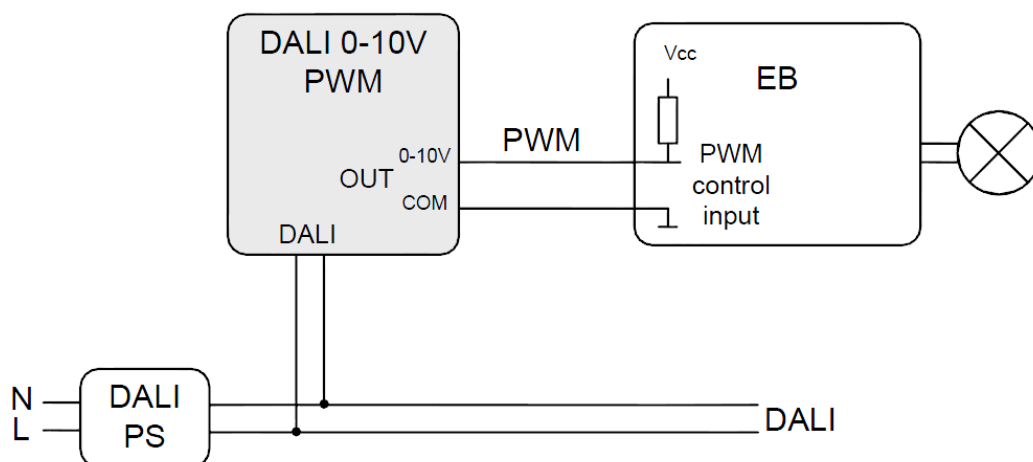
control characteristic:

DALI 0 (=OFF) correlates with a voltage below 0,5V.

DALI 1-254 is transformed to a 1-10V output voltage (10%-100% PWM pattern).



Note: the voltage values given in the control characteristics are valid only in the case that 10VDC are applied to the output



typical application

Connection

The interface is supplied directly via the DALI signal line. It must not be connected to the mains. A typical value of the current consumption is approximately 3.1 mA. For supplying components on a DALI line the installation of a DALI power supply (DALI PS) is necessary. The connection to the DALI line is polarity free. Internally the DALI-terminals are connected through as visualized on the housing.

The PWM output supports sinking currents up to 1mA.

The terminals allow cross sections of the connection wire from 0.5 to 1.5 mm².

Function

The DALI 0-10V PWM interface converts the desired DALI dim level in a corresponding PWM-pattern. Up from firmware 2.0 DALI device type 5 is supported. This allows the selection of the control characteristic with respect to output range (0-10V/1-10V) and dimming curve (linear/logarithmic). The relationship is clearly presented by the control characteristic diagram. The maximum output current is 1mA (current sink).

Firmware 2.0 and higher support a manufacturer specific mode as well. It allows the customized adaption of the output voltage range. This option can be easily accessed with the help of the DALI Cockpit software tool.

DALI instruction set

The DALI PWM is based on the standard for DALI control gear (IEC 62386-102) and device type 5 extension (IEC 62386-206).

Commands and functions referring to the SYSTEM FAILURE LEVEL are not supported. This parameter is used as the dim level that should be applied on the output in case of a

DALI line outage. Since the DALI 0-10V is a bus powered device there is no possibility to apply a specific predefined signal on the output without being under power. In the case of a DALI-line outage 100% are applied on the output.

Purchase Information

article number: 86458508-PWM

DT5 interface module for conversion of DALI signals to a PWM signal, galvanic isolation between DALI-input and PWM output

similar components:

DALI PWM (Art.Nr. 86458508-100) with PWM output (100mA), galvanic isolation between DALI-input and PWM output

DALI 0-10V LE (Art.Nr. 86458508-LE) with analog output, suitable for 0-10V drivers with electrically isolated control input

DALI 0-10V AN (Art.Nr. 86458508-AN) with analog output, galvanic isolation between DALI input and 0-10V output, automatic calibration algorithm

Additional Information

Datasheets and manuals

<https://jumitech/produkter>

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DALI 100k



Datasheet

Control Device

DALI control module with analogue
input for connection of a 100kΩ
potentiometer

Art. Nr. 86458506

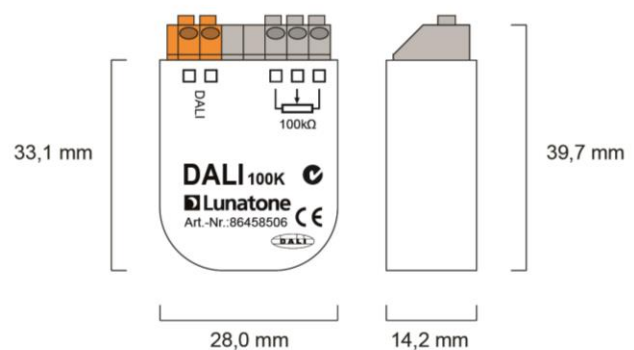
DALI 100k Control Device

Overview

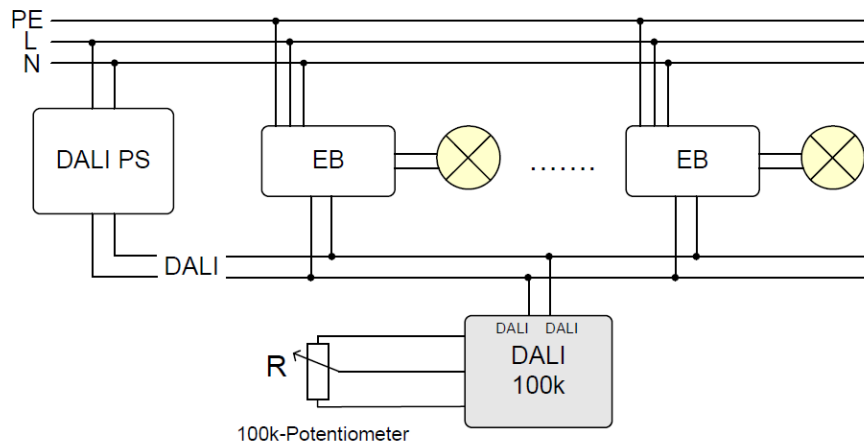
- Compact DALI control module with analog input for connection of a 100kΩ potentiometer
- The input signal is directly converted in a DALI direct arc power level.
- The conversion can start either periodically or triggered.
- An input voltage change (>2%) is used as trigger event.
- Individual addresses, group addresses or broadcast can be set as destination address
- Configuration with the help of the DALI-Cockpit software and a DALI-USB Interface
- Multiple DALI 100k modules can be used on the same DALI line
- The module can be installed in the conduit box behind the potentiometer.
- The DALI 100k is supplied directly via the DALI signal line.

Specification, Characteristics

type	DALI 100k
article number	86459506
supply	via DALI signal line
typ. current consumption	<3 mA
input	100kΩ Potentiometer
output	DALI
storing temperature	-20°C ... +75°C
operational ambient temperature	-20°C ... +75°C
protection class	IP20
connecting wire cross section	0.5-1.5 mm ²
wiring length to potentiometer	50 cm
geometry	40mm x 28mm x 15mm



geometry



typical installation

Installation

The DALI 100k is supplied directly via the DALI signal line (typical current consumption <3mA). DALI power supply units like the DALI PS have the capability to supply control gear as well as control devices. The connection to the DALI-line is polarity free and protected against overvoltage of up to 270Vac.

The DALI 100k module can easily installed in recessed conduit boxes.

Function, Factory Settings, Addressing and Configuration

The DALI 100k modules measures the analogue input value and converts it to a digital DALI dim level, which can be sent to a destination address as direct arc power level. A typical structure of an installation is shown above. For simple applications the factory setting is sufficient and the device can be used immediately after being connected:

- Destination address: broadcast
- Input value 0%-100% is converted to DALI range 0-254
- Transmission of a new direct arc power level after input signal change

- A fadetime of 0.7s is set before a direct arc power level is sent

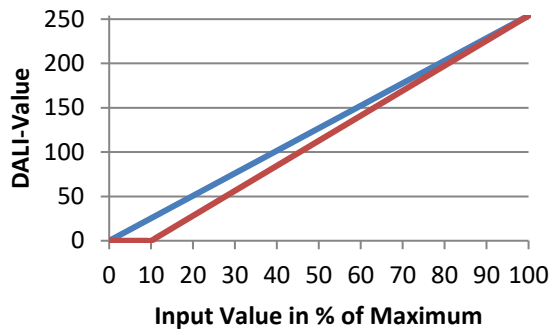
If the factory settings should do not cover all requirements, it is possible to adjust all settings using the DALI USB interface and the software “DALI-Cockpit”. The DALI-Cockpit is a free configuration tool for DALI systems. It enables the communication with devices in the DALI circuit (standard DALI) as well as addressing and configuration of the DALI 100k¹. The DALI-Cockpit and DALI-USB Interface are only required for configuration and can be removed after setup (see typical installation drawing).

During the addressing process the module is going to be registered and listed (random addressing). In addition several adjustments can be made:

Transmission Behaviour

The transmission behaviour can be adapted towards ensured turning off. An offset value for the input value range can be defined below which the DALI value 0 will be displayed. Possible values for this threshold are 0% (default) 1%, 5% and 10% of the input value range.

¹ besides the DALI 100k all other Lunatone DALI components are supported.



Transmission of a new value

The conversion can be periodic or released by a trigger. The change of the input signal of 2% can be used as such a trigger. For periodic repeated conversions different time frames are possible: (0.7s, 1s, 1.4s, 2s, 2.8s, 4s, 5.7s, 10s, 30s, 1m, 2m, 5m, 10m, 30m, 60m).

Fading

The sending the fadetime 0,7sec before a dim value change can be deactivated. To ensure a homogeneous brightness scale fading is necessary. With the deactivation it is up to the user how and with which devices the dimming is being performed. (for example: Fast Fadings with DT6 devices with a fast fade time of 400ms)

Target Addresses

Also the target addresses, which should receive dim values, can be configured. Up to 4 destinations can be defined, single device addresses, groups as well as broadcast can be chosen.

Modes of Operation

The DALI 100k offers 3 operating modes.

Master Mode (Default)

In this operating mode the device works as DALI control device sending DALI commands to DALI ballasts. In combination with a central system controller the direct master mode

might not be suitable and should be changed to one of the other operating modes.

Event Message Mode

If a dimming value has to be transmitted, this mode enables the device to send a signal to a specific target address (to itself or any other master), all in the scope of the proprietary protocol extension.

In this operating mode the device does not directly control DALI-loads, but is active at the DALI signal line.

Slave Mode

The slave mode is a passive operating mode. The DALI 100k is not automatically active, it only replies on request. The information retrieval of analogue values can be done with special commands, provided within the scope of the proprietary protocol extension. It is also possible to give the DALI 100k a standard DALI-address and retrieve the information via query scene level 3.

The operating mode can be selected with the DALI-Cockpit software.

Additional Information

Datasheets and manuals

<https://jumitech/produkter>

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

<http://lunatone.at/en/downloads/Lunatone-DALI-Cockpit.zip>

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DALI DSI

Datasheet Interface



Signal converter for integrating
ballasts with DSI-input in DALI-
systems

Art. Nr. 24034689

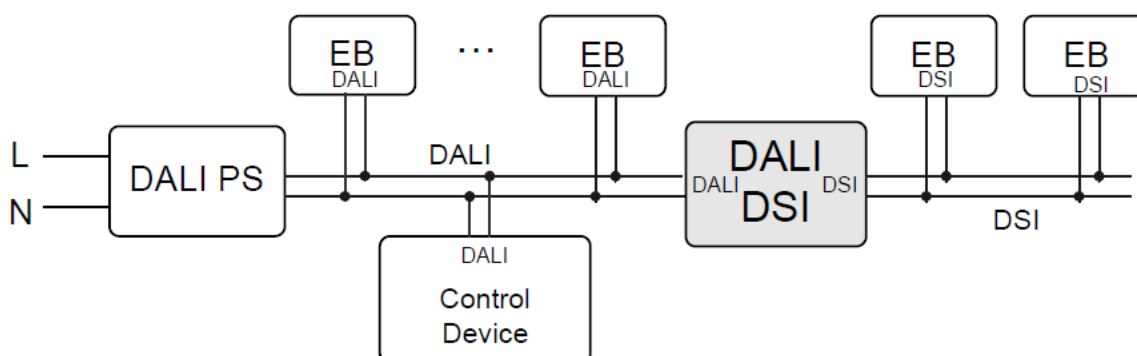
DALI DSI Interface Modul

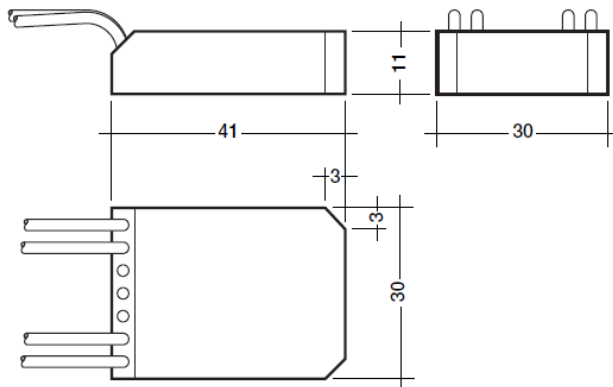
Overview

- Compact converter
- Conversion of DALI-commands in DSI commands
- integration of up to 5 DSI-based ballasts (e.g.: Tridonic PCA ECO) in DALI systems
- 1 DALI address, the device can be assigned to groups and scenes
- simple configuration with DALI-Cockpit software
- the modul is powered directly by the DALI-line, no additional supply required
- suitable for back box mounting

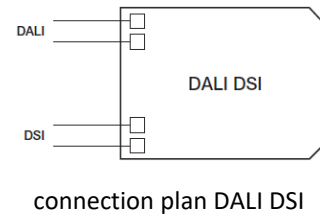
Specification, Characteristics

type	DALI DSI
article number	24034689
electrical data:	
supply	via DALI-line
typ. current consumption DALI	16 mA
number of DALI addresses	1
output	DSI
max. number of DSI devices	5
technical data:	
storing and transportation temperature	-20°C ... +75°C
operating ambient temperature	-20°C ... +75°C
protection class	IP20
connecting wires	250mm / 0.75 mm ²
mounting	back box
dimensions	41mm x 30mm x 11mm





dimensions DALI DSI



Purchase Order Information

Art.Nr. 24034689: DALI DSI, conversion of DALI-commands to DSI-commands, max. 5 DSI ballasts

Additional Information

Datasheets and manuals

<https://jumitech/produkter>

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

<http://lunatone.at/en/downloads/Lunatone-DALI-Cockpit.zip>

Contact

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DALI DT8 to DT6



Datasheet

DALI DT8 to DT6 converter

DALI-interface module for the
conversion of DALI DT8-Tc commands
to DALI DT6 commands

Art. 89453859

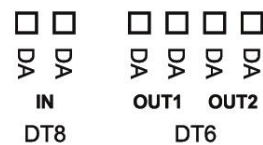
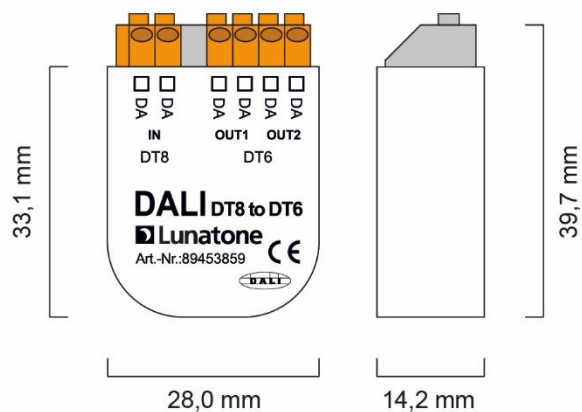
DALI DT8 to DT6 Interface

Overview

- for tunable white control of 2 DALI DT6 1-channel LED power supplies
- 1 DALI Address (DT8, Type Tc)
- Separate output for coldwhite and warmwhite channel (factory default)
- Alternative output mode: dimlevels for coldwhite and warmwhite channel are sent to groups (G0 and G1)
- Easy system expansion with the help of DALI Expander, DALI Expander3 or RepeaterPS
- configuration with PC-software tool DALI-Cockpit and DALI USB interface

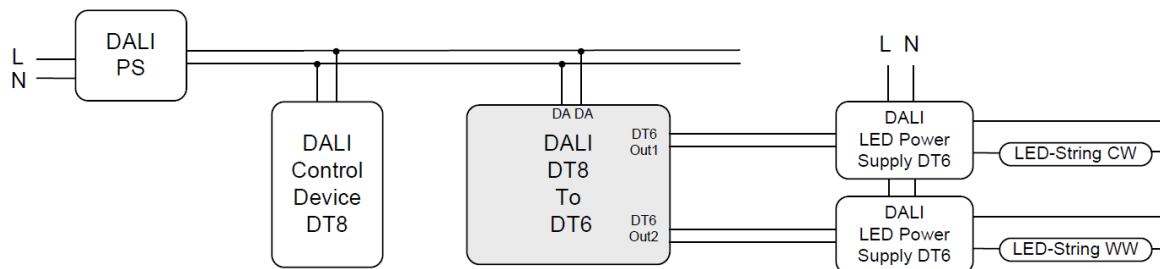
Specification, Characteristics

type	DALI DT8 to DT6
article number	89453859
electrical data:	
control input	DALI
current consumption	2mA + current consumption subnet
output	2xDALI
number of DALI addresses	1 (DT8)
power on behaviour	configurable via DALI: 0%-100% or last level
technical data:	
behaviour after power on	configurable via DALI
storage/transportation temperature	-20°C-75°C
operational ambient temperature	-20°C-60°C
protection class	IP20
Maximum connecting wire cross-section	1.5 mm ²
mounting/housing	back box
dimensions (LxWxH)	40mm x 28mm x 14mm

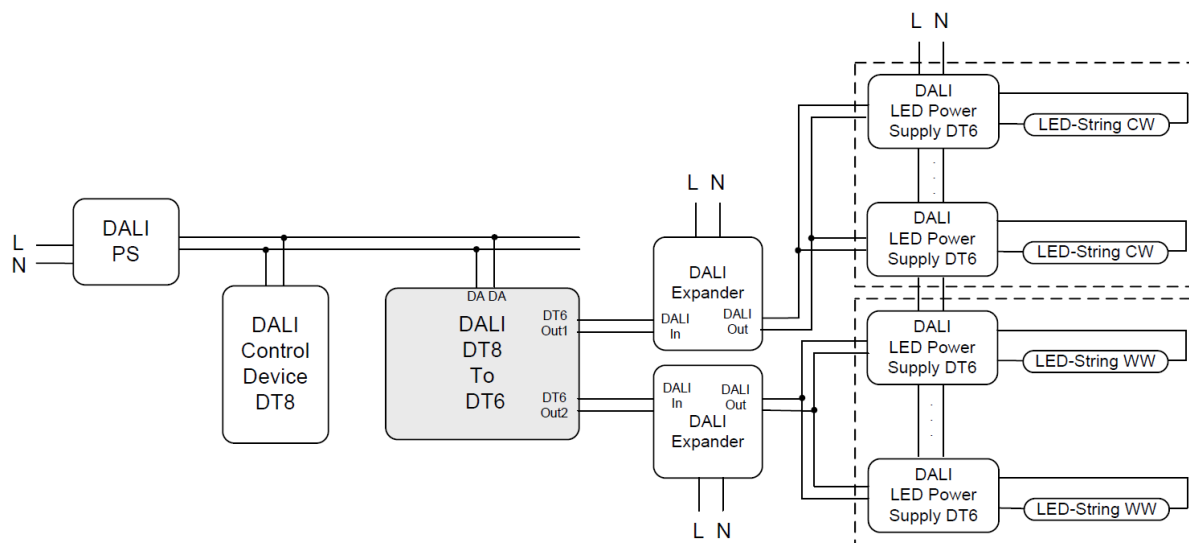


connection plan DT8 to DT6

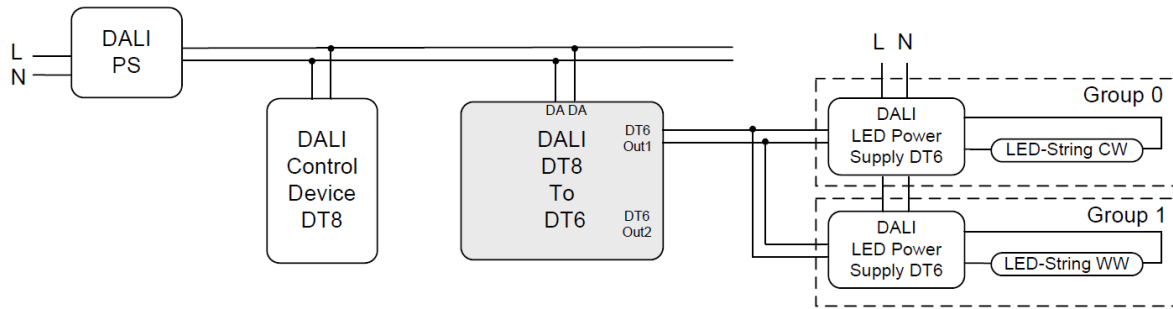
dimensions DALI DT8 to DT6



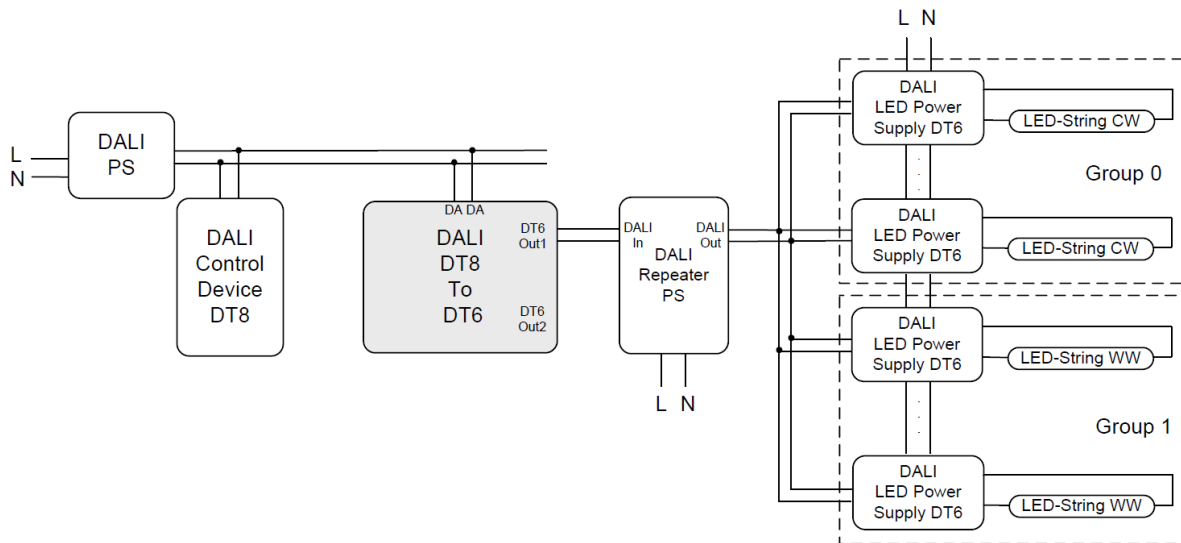
CW and WW channel on separated outputs



CW and WW channel on separated outputs, DALI-Expanders are used for increasing the number of LED power supplies



CW and WW on same output: the LED power supplies must be assigned to group G0 (for CW) and G1 (for WW)



CW and WW on same output: DALI Repeater with integrated bus power supply is used for increasing the number of LED power supplies

Installation

The device is supplied by the DALI-signal line. The current consumption depends on the number of connected DALI ballasts. The own consumption is 2mA.

If more dimmers should be connected to the output the number of led power supplies can be increased easily with the help of DALI Repeater PS, DALI Expander or DALI Expander 3.

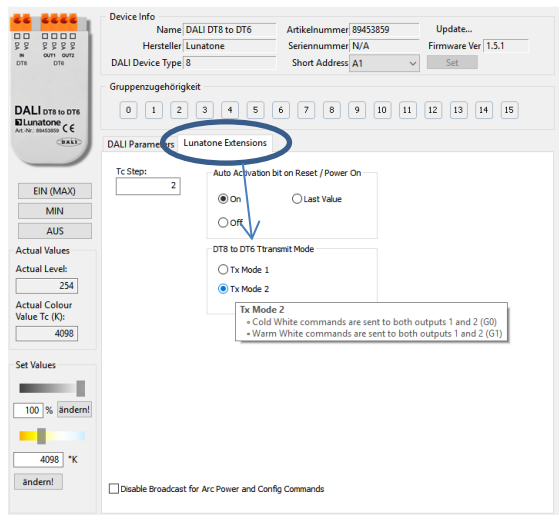
Function

The DALI DT8 to DT6 converter represents one control gear on the DALI-line (DT8, Mode Tc).

Commands for dimming and colour temperature adaption are converted in dimlevels for a cold white and a warm white channel.

Depending on the output mode the dimlevels are sent either broadcast on two separate outputs (Out1: cold; Out2: warm, factory default) or on both outputs to group G0 (cold) and G1 (warm).

The output mode (DT8 to DT6 Transmit Mode) can be set easily in the DALI-Cockpit in the tab „Lunatone Extensions“.



Purchase Information

Art.Nr. 89453859, DALI DT8 to DT6 Converter

Additional Information

Datasheets and manuals

<https://jumitech/produkter>

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

<http://lunatone.at/en/downloads/Lunatone-DALI-Cockpit.zip>

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DALI I/O 0-10V



Datasheet

Interface

Interface module for the control of
damper actuators and servomotors
with 0-10V control input via DALI

Art. Nr. 86459528

DALI I/O 0-10V Interface

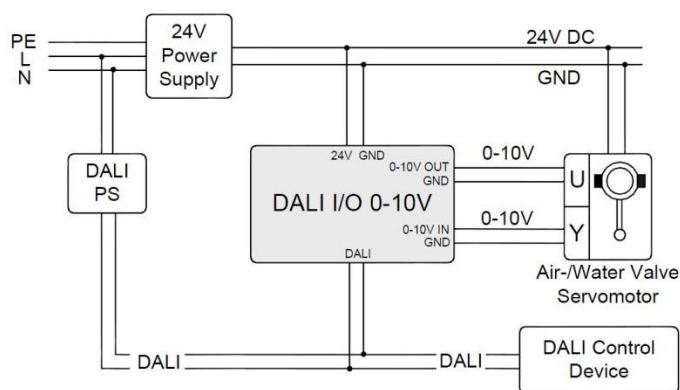
Overview

- Compact interface for the control of servomotors with 0-10V control input via DALI
- 0-10V input for feedback of actual position of the servomotor
- Conversion of the DALI dim level into a 0-10V voltage control signal (source type)
- The feedback signal (0-10V input) can be queried via DALI
- The interface acts like a standard DALI ballast. Hence it has its own DALI address and can be added to groups or scenes.
- The device can be configured with the help of the DALI Cockpit software via DALI-USB Interface
- 24V DC are required as supply voltage for the DALI I/O 0-10V interface
- In default configuration the DALI dim levels are converted into 0-10V signals. The value of the 0-10V input (feedback) can be read out using the QUERY ACTUAL LEVEL command.

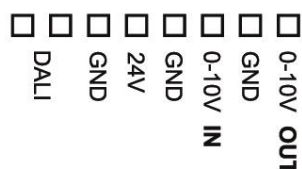


Specification, Characteristics

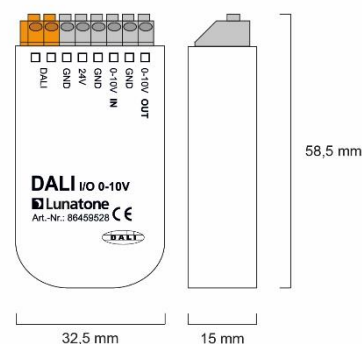
type	0-10V / DALI Converter
article number	86459528
supply	24V DC
typ. current consumption DALI line	2 mA
control input	DALI
input	0-10V
output (source type)	0-10V
temperature	0°C-50°C
protection class	IP20
connection wire cross section	0.5-1.5 mm ²
geometry (L/W/H)	59 / 33 / 15 mm



typical application



connection plan



geometry

Additional Information

Datasheets and manuals

<https://jumitech/produkter>

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

<http://lunatone.at/en/downloads/Lunatone-DALI-Cockpit.zip>

Contact

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DALI Jalousie

Datasheet

Interface



DALI module to control jalousie modules with 230V ~ control inputs for Up and Down

Art. 86458676-DE (remote ceiling)

Art. 86458676-HS (Din Rail)

DALI Jalousie Interface

Overview

- Suitable for the control of jalousie modules with separate 230V input for Up and Down via DALI
- interlocked outputs
- for currents of up to 4A
- the module is controlled by the DALI-commands RECALL MAX or UP for Up and RECALL MIN or DOWN for Down, the state holds until an OFF is received
- The module is supplied directly via the DALI line, no additional supply required
- The interface has a DALI address and can be added to groups, there are 4 programmable profiles for adjusting the tilt angle and to open or close the blinds.
- Connect a Somfy Soliris wind, sun and rainsensor with the help of a DALI Soliris module

Specification, Characteristics

Type	DALI Jalousie	
article number	86458676-HS	86458676-DE
electrical data:		
power supply	via DALI-line	
typ. current consumption	5.5 mA	
control input	DALI	
input	230V~	
output	230V~ (Up or Down, interlocked)	
relay contact switching voltage	250Vac	
nominal load and current	1000VA / 4A	
operating cycles with 4A/250Vac, resistive	10 ⁵	
max. switching frequency relay	0.2 Hz	
technical data:		
storing/transportation temperature	-20°C ... +75°C	
operational ambient temperature	-20°C ... +60°C	
protection class	IP20	
connecting wire cross section	2,5 mm ²	
housing	din rail	remote ceiling
dimensions	98mm x 17.5mm x 56mm	120mm x 30mm x 21mm

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DA DA

Lout up Lin Lout down

☐ ☐ ☐

N1 N2

☐ ☐

☐ Lout down

☐ Lout up

☐ Lw

☐ N1

☐ N2

□-□ DA DA

The diagram illustrates the wiring for a DALI motor control system. A power supply (L, N) is connected to a DALI PS (Power Supply) and a DALI Jalousie (Motor Control Unit). The DALI Jalousie has terminals for Lin, Lout up, Lout down, nc-N1, and nc-N2. The Lout up and Lout down lines connect to a motor control unit (M) which is part of a 'Jalousie + Motorcontrol' assembly. The DALI PS and DALI Jalousie are connected to a DALI Control Device via DALI lines.

The diagram shows the following components and connections:

- Central Unit (Zentrallaster):** A three-phase supply (L, N, PE) enters from the left. The unit has terminals for Com, Auf, Ab, and a common ground.
- Optional Rain Sensor (Regenfühler RFA 005):** Labeled "(optional) Regenfühler RFA 005 (potentialfrei) 705588". It is connected to the "Auf" line and ground.
- SOLIRIS Sensor:** Labeled "SOLIRIS Sensor Wind-, Sonnenfühler 154060". It is connected to the "Auf" line and ground.
- Optional Thermostat (709808):** Labeled "(optional) Thermostat 709808". It is connected to the "Auf" line and ground.
- Control Unit (DALI Soliris):** A box at the bottom left labeled "DALI Soliris". It is connected to the "Auf" line and ground.
- Control Unit (Zentralbefehl zu weiteren Steuergeräten):** A box at the bottom right labeled "Zentralbefehl zu weiteren Steuergeräten". It is connected to the "Auf" line and ground.

The diagram also includes a transformer with a ratio of $1: \sqrt{3} \approx 1:1,732$ and a label $2 \times 230,6 \text{ V}$.

2018/03/15

Installation

The module is connected to the DALI-signal line, no additional power supply is required. A typical value for the current consumption of the DALI Jalousie module is about 5.5 mA. The connection to the DALI-terminals is polarity free.

The module is designed for a continuous load of 1000VA.

Do not connect N1 and N2.

The terminals fit wires with a cross section of 2,5mm².

Function

The DALI Jalousie can be addressed and controlled by the assigned DALI address. It converts DALI commands in up/down commands to the blind motor control. The 230V motor control signals (for up and down) are interlocked, that means that at any time only one of those signals is applied to the blind motor.

Reaction of the module to DALI-commands:

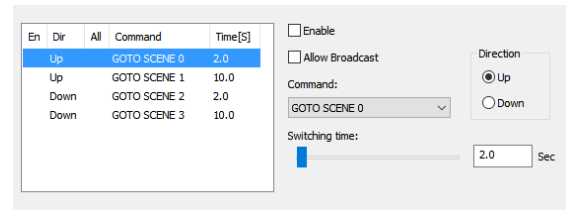
DALI-command	Jalousie control signal
RECALL MAX	UP: Loutup 230V / Loutdown 0V
RECALL MIN	DOWN: Loutup 0V / Loutdown 230V
OFF	OFF: : Loutup 0V / Loutdown 0V
UP	UP: Loutup 230V / Loutdown 0V
DOWN	DOWN: Loutup 0V / Loutdown 230V
GOTO SCENE X	4 scene commands can be used for the recall of custom profiles (direction and duration can be configured for each profile)

For a customized adjustment of the module to the used jalousie 4 freely programmable profiles are available. They can be configured with the help of the DALI-Cockpit software tool.

For each profile the direction (UP or DOWN) can be as well configured as the duration how

long this state should be applied. With the help of these profiles typically the tilt angle (min/max) and a complete Up and Down movement can be preconfigured.

For the recall of these profiles scene commands are used:



The DALI Jalousie interface does not react to broadcast commands in factory default state. However for the recall of profiles this restriction can be cancelled.

Purchase Information

Art.Nr. 86458676-HS DALI Jalousie, din rail

Art.Nr. 86458676-DE DALI Jalousie, remote ceiling

Additional Information

Datasheets and manuals

<https://jumitech/produkter>

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

<http://lunatone.at/en/downloads/Lunatone-DALI-Cockpit.zip>

Contact

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www.jumitech.dk

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



DALI PWM Interface

Datasheet

DALI to PWM Interface

DT5 Converter Module for the
integration of PWM controlled
drivers in DALI lighting systems

Art. Nr. 86458508-100

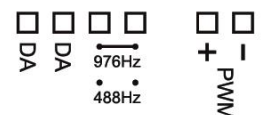
DALI PWM Interface

Overview

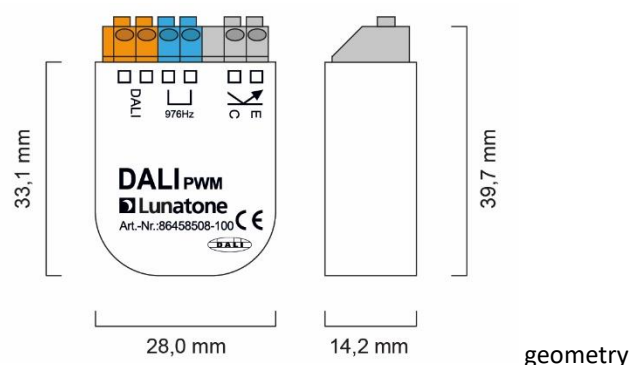
- module converting DALI dimming commands into PWM signal
- the module is especially designed to operate with dimmable LED-Driver (with PWM control input, e.g. Meanwell HLG, HLN, NPF or LPF series)
- provides advantage of fail-safe digital signal data communication compared to types with analog output voltage
- transformation of DALI 8-Bit arc power level into PWM signal from 0% to 100%
- Selection of linear or logarithmic dimming curve (DT5)
- Output range selectable between 0-100% and 10-100% (DT5)
- maximum output current of 100mA (current sink), hence it is possible to connect many PWM controlled drivers
- maximum voltage of 60V at output
- PWM-frequency can be selected by jumpers (488Hz/976Hz)
- The module is supplied directly by the DALI signal line
- galvanic isolation between DALI-input and PWM-output

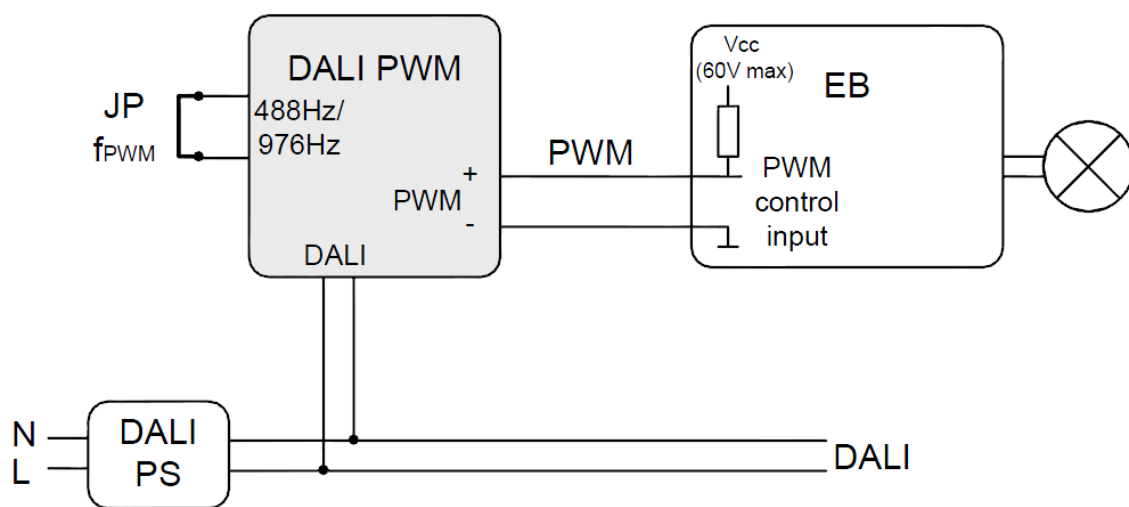
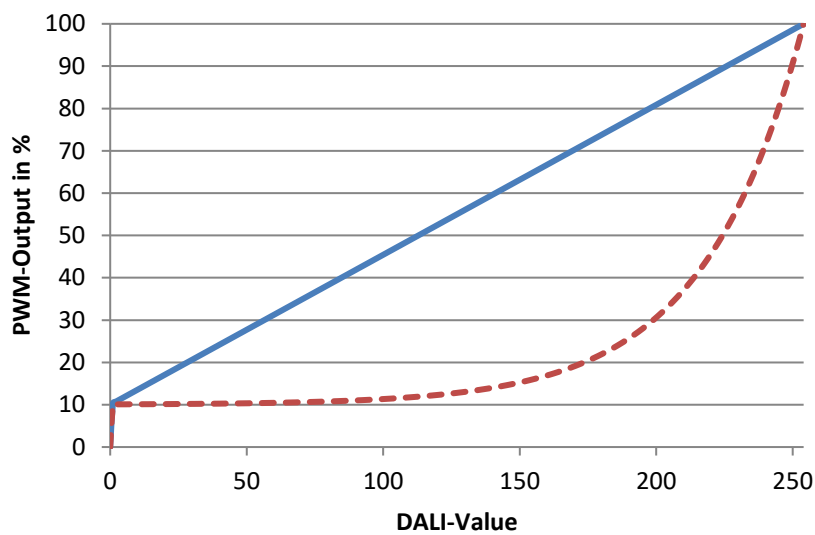
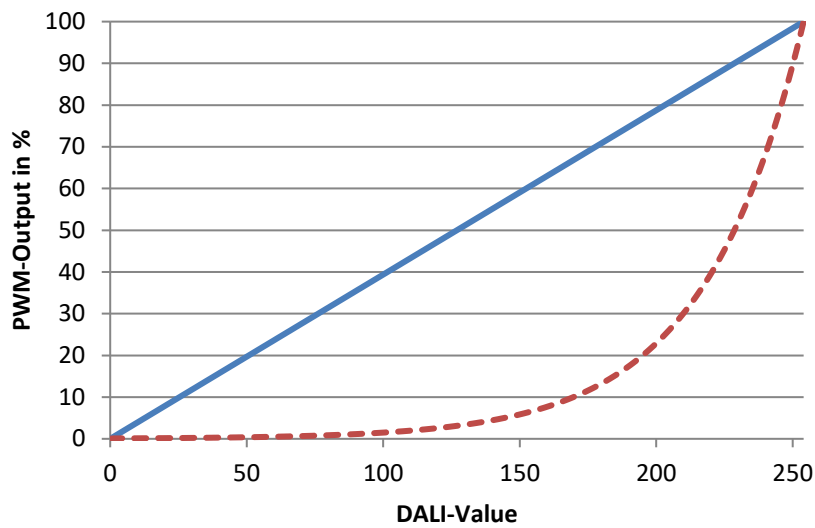
Specification, Characteristics

type	DALI PWM 100mA
article number	86458508-100
supply	via DALI signal line
typ. current consumption DALI	3.1 mA
input	DALI
output	0%-100% PWM 100mA (sink), 60VDC max. PWM-Frequency: 488Hz/976Hz 10%
geometry (l/w/h)	39.7mm / 28.0mm / 14.2 mm
weight	~10g
storing and operational ambient temperature	-20°C to 75°C
protection class	IP20
connecting wire cross section	0.5-1.5 mm ²



connection plan





typical structure

Connection

The interface is supplied directly via the DALI signal line. It must not be connected to the mains. A typical value of the current consumption is 3.1 mA. For supplying components on a DALI line the installation of a DALI power supply (DALI PS) is necessary. The connection to the DALI line is polarity free.

The PWM output supports sinking currents up to 100mA. Therefore multiple PWM controlled loads can be connected to the output. The voltage connected to the current sinking PWM output may not exceed 60VDC. The terminals allow cross sections of the connection wire from 0.5 to 1.5 mm².

Function

The DALI PWM interface converts the desired DALI dim level in a corresponding PWM-pattern. The conversion curve can be influenced as defined in the DALI DT5 standard (linear/logarithmic control characteristic, 0-100% or 10-100% output range). This relationship is clearly represented by the control characteristic diagram.

The maximum output current is 100mA (current sink).

With the help of a jumper the PWM-frequency on the output can be changed from 488Hz to 976Hz.

DALI instruction set

The DALI PWM is based on the standard for DALI control gear (IEC 62386-102) and device type 5 extension (IEC 62386-206).

Commands and functions referring to the SYSTEM FAILURE LEVEL are not supported. This parameter is used as the dim level that should be applied on the output in case of a DALI line outage. Since the DALI 0-10V is a bus powered device there is no possibility to apply

a specific predefined signal on the output without being under power. In the case of a DALI-line outage 100% are applied on the output.

Purchase Information

article number: 86458508-100

DT5 interface module for conversion of DALI signals to a PWM signal (maximum output current 100mA), galvanic isolation between DALI-input and PWM output

similar components:

DALI 0-10V PWM (Art.Nr. 86458508) with PWM output, galvanic isolation between DALI-input and PWM output

DALI 0-10V LE (Art.Nr. 86458508-LE) with analog output, suitable for 0-10V drivers with electrically isolated control input

DALI 0-10V AN (Art.Nr. 86458508-AN) with analog output, galvanic isolation between DALI input and 0-10V output, automatic calibration algorithm

Additional Information

Datasheets and manuals

<https://jumitech/produkter>

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

<http://lunatone.at/en/downloads/Lunatone-DALI-Cockpit.zip>

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DALI RM8 PWM
DALI RM8 1-10V
DALI RM16 1-10V

Datenblatt

**Interface for DALI to 10V PWM with
 SPST-relay**

Converter module for the integration
 of 0-10V or 1-10V controlled ballasts
 in DALI lighting systems (DT5)



Art. 86458668 (RM8 PWM)

Art. 86458668-AN (RM8 1-10V)

Art. 86458936 (RM16 1-10V PWM)

Art. 86458667-DE (RM16 0-10V PWM)

DALI RMx PWM/1-10V Interface

Overview

- For the integration of electronic ballasts with PWM input or 0-10V input
- An SPST-relay offers the possibility to power on/off the mains supply of the electronic ballast
- Types with PWM output offer the high noise immunity of digital signal transmission, suitable for electronic ballasts with PWM control input (e.g.: Meanwell HLG, HLN, NPF or LPF series)
- The type with analog output offers an automatic calibration algorithm for the output signal.
- Transformation of DALI 8-bit direct arc power level into PWM output signal (0-100%) or analog voltage (1-10V)
- DALI DT5 compatible: linear and logarithmic control characteristic
- DALI DT5: change of output range for PWM-type (0-100% / 10-100% PWM)
- Suitable for multiple ballast (max. sinking current 2mA)
- RM16 type for high inrush currents up to 160A
- The control of the SPST-relay is directly linked to the 8-bit direct arc power level. If the value is 0 the relay is OFF. At any other value the relay is ON.
- The module is supplied directly by the DALI signal line. An additional supply is not needed.
- The interface can be addressed and assigned to groups and scenes.
- galvanic isolation between DALI input and PWM or 1-10V output

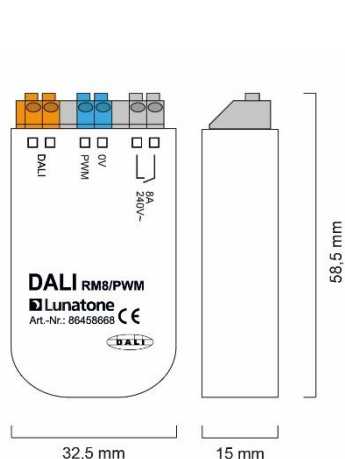
Specification, Characteristics

type	DALI RM8 1-10V	DALI RM8 1-10V	DALI RM16 1-10V	DALI RM16 0-10V PWM-DE
article number	86458668	86458668-AN	86458936	86458667-DE
technical data:				
supply	via DALI signal line			
typ. current consumption DALI-line	3 mA	4.2 mA	3 mA	3 mA
input	DALI			
output (0-10V)	0-100% PWM (14Bit, 488Hz), current sink 2mA	1-10V analog, current sink 1mA	0-100% PWM (14Bit, 488Hz), current sink 2mA	0-100% PWM (14Bit, 488Hz), current sink 2mA
relay output switch on/off voltage	250Vac/400Vac			
max. nominal load relay	1000VA	1000VA	2000VA	2000VA

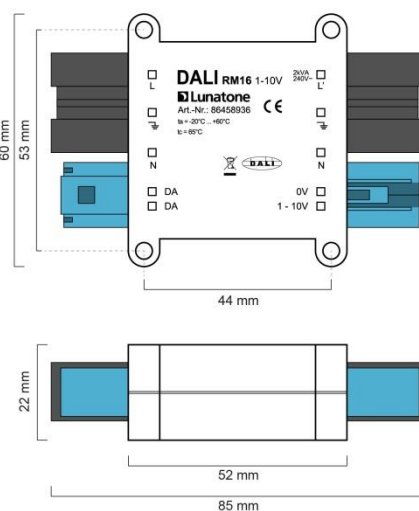
max. switching current relay	8A	8A	16A	16A
max. inrush current relay	80A	80A	160A	160A
type of relay contact	1 On/Off			
relay: number of switching operations at 16A/250Vac, resistive	3x10 ⁴			
maximum switching frequency	1 Hz			

technical data:

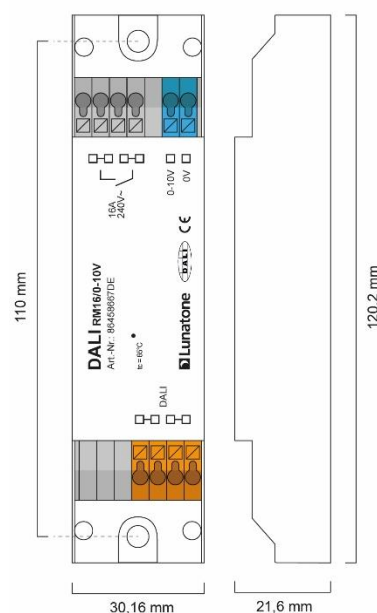
storing and transportation temperature	-20°C ... +75°C			
operational ambient temperature	-20°C ... +60°C			
protection class	IP20			
connecting wire cross section	0,5-1,5 mm ²	0,5-1,5 mm ²	connector	0,5-1,5 mm ²
mounting	back box	back box		remote ceiling



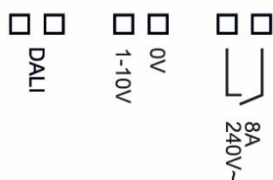
dimensions RM8 PWM
dimensions RM8 1-10V



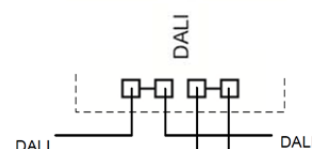
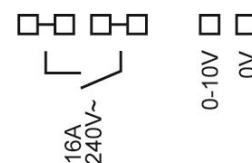
dimensions RM16 1-10V

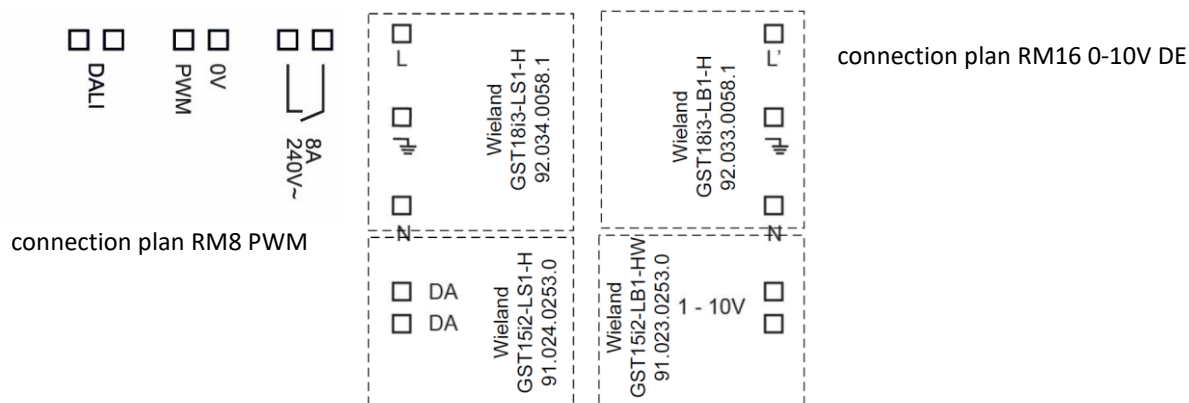


dimensions RM16 0-10V DE

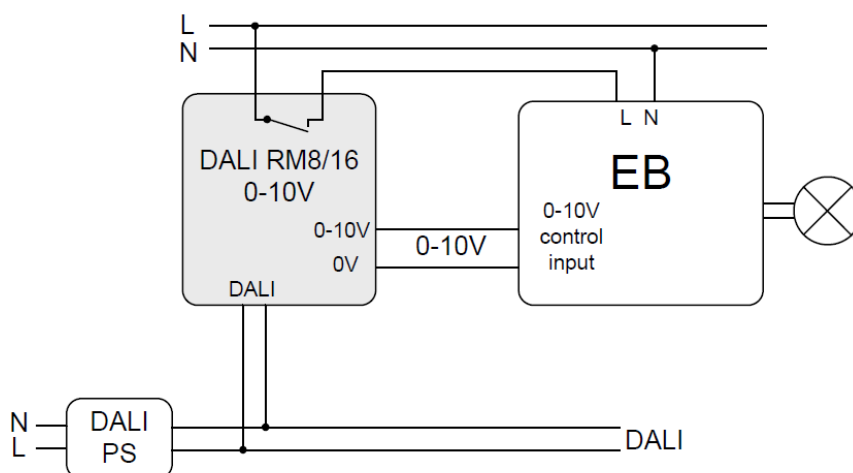


connection plan RM8 1-10V

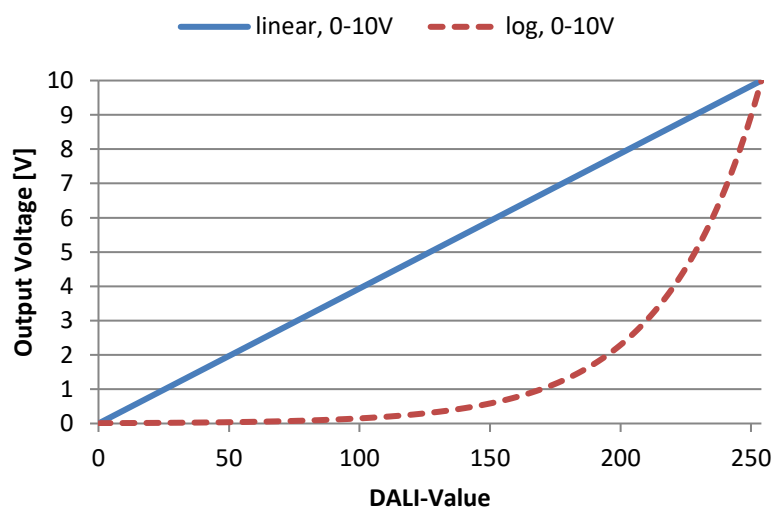




connection plan RM16 1-10V



typical installation

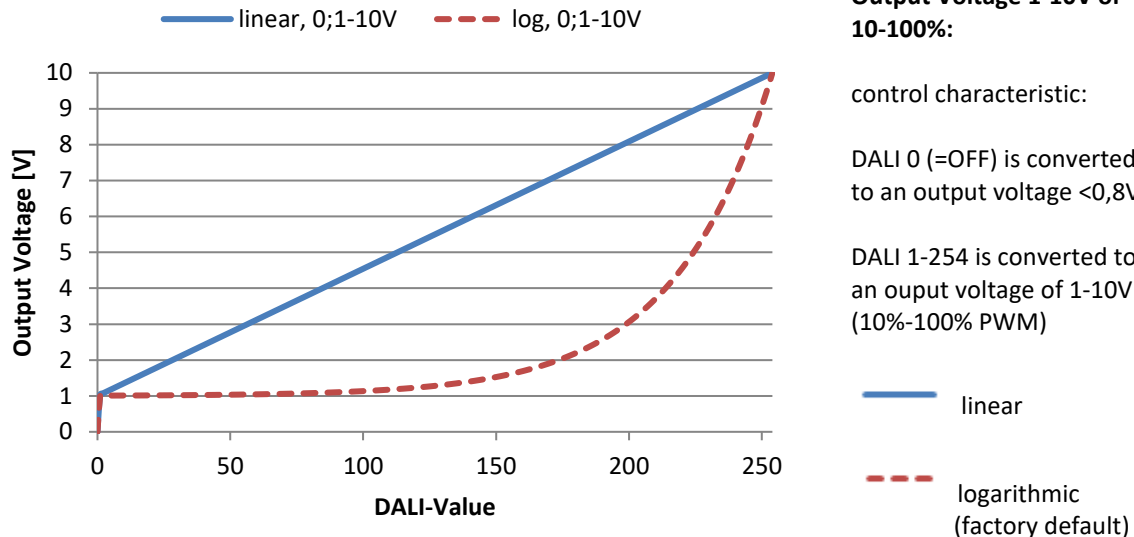


Output Voltage 0-10V or 0-100%:

control characteristic:

DALI 0-254 is converted to an output voltage of 0-10V (0%-100% PWM)

— linear
- - - logarithmic



Hint: the voltage values in the characteristics are only valid if the device is supplied with 10V at the 0-10V output.

Installation

The module has to be connected directly to the DALI line. It does not need any additional supply. Typical values of the current consumption depend on type and range from 3mA to 4.2mA. The connection to the DALI line is polarity free. Types providing PWM-output support sinking currents up to 2mA, the type with analog output sinking currents up to 1mA.

The SPST relay of the RM8 module support nominal loads of up to 1000VA. The RM16 type supports nominal loads of up to 2000VA and inrush currents up to 160A.

The terminals allow cross sections of the connecting wires from 0.5-1.5mm².

Function

The interface converts the desired DALI dim level into a corresponding PWM pattern or analog output voltage.

Up from firmware 2.0 device type 5 is supported. Therefore a linear and a logarithmic control characteristic are available. In addition for the PWM-Types the output range can be selected between 0-10V and 1-10V. The DALI value [0-254] is converted either linearly or logarithmic to the output range. The behaviour is shown in detail in the control characteristics.

The SPST-relay is directly linked to the 8-bit direct arc power level. If the value is 0 the relay is OFF, whereas at any other value [1...254] the relay is ON.

The combination of the 0-10V control signal and the additional SPST-relay offers the possibility to power on/off the mains supply of the 0-10V controlled electronic ballast.

In case of a system failure 100% (10V) are applied at the 0-10V control output. The behaviour of the relay depends on the firmware version. In any case the relay holds the output state. In newer versions the system failure level can be set. The relay can be switched on or off or set to hold the current state (option available up from FW 3.5.0 at

86458667-DE, up from FW 3.3.0 at 86458668, and up from FW 1.3.0 at 86458668-AN).

DALI Instruction Set

The module is based on the standard for DALI Control Gear (IEC 62386-102) and Device Type 5 extension (IEC 62386-206). With few exceptions mentioned above the entire instruction set defined by the DALI standard is supported. Furthermore the newer versions already support the DALI2-command GOTO LAST ACTIVE LEVEL.

Auto Calibration Mode

In the DALI RM8 1-10V module with analog output an automatic calibration routine is implemented. After power up the module the stored calibration values are checked. If a new calibration is required a duration of up to 2 minutes has to be taken into account before the module can be used. The automatic calibration can be en-/disabled and triggered manually with the DALI Cockpit software tool. While the calibration is running the device does not react to any dimming commands.

Purchase Order Information

Art.Nr. 86458668: DALI RM8 0-10V PWM, DALI to 0-10V PWM converter with switch-on relay, DT5, 0-10V output 2mA max, max. nominal load relay 1000VA, back box and luminaire integration

Art.Nr. 86458668-AN: DALI RM8 1-10V analogue, DALI to 0-10V converter with switch-on relay, DT5, 0-10V output 1mA max, automatic load calibration, max. nominal load relay 1000VA, back box and luminaire integration

Art.Nr. 86458936: DALI RM16 1-10V PWM, DALI to 0-10V PWM converter with switch-on relay, DT5, 0-10V output 2mA max, max.

nominal load relay 2000VA, Wieland-connectors

Art.Nr. 86458667-DE: DALI RM16 0-10V PWM, DALI to 0-10V PWM converter with switch-on relay, DT5, 0-10V output 2mA max, max. nominal load relay 2000VA, remote ceiling and luminaire integration

Additional Information

Datasheets and manuals

<https://jumitech/produkter>

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

<http://lunatone.at/en/downloads/Lunatone-DALI-Cockpit.zip>

Contact

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DALI Somfy



Datasheet Interface

DALI-Somfy interface for integrating
Somfy animeo IB+ motor controllers
in DALI circuits

Art. Nr. 86458491

DALI Somfy animeo Interface

Overview

- Interface for the integration of Somfy animeo IB+ motor controllers in DALI-systems
- The DALI-Somfy animeo interface requires 4 DALI addresses and can therefore independently control up to 4 blinds (1 interface per motor controller)
- The DALI interface acts like a standard DALI-ballast, each of the 4 addresses can be added to groups or scenes. The blind positions (height and angle) are stored like lighting scenes.
- The module can be accessed by the DALI Cockpit software tool via DALI USB interface.
- The DALI-Somfy animeo interface will only function after the running and winding times have been set on the motor controller (Somfy).

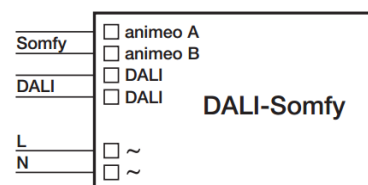
Specification, Characteristics

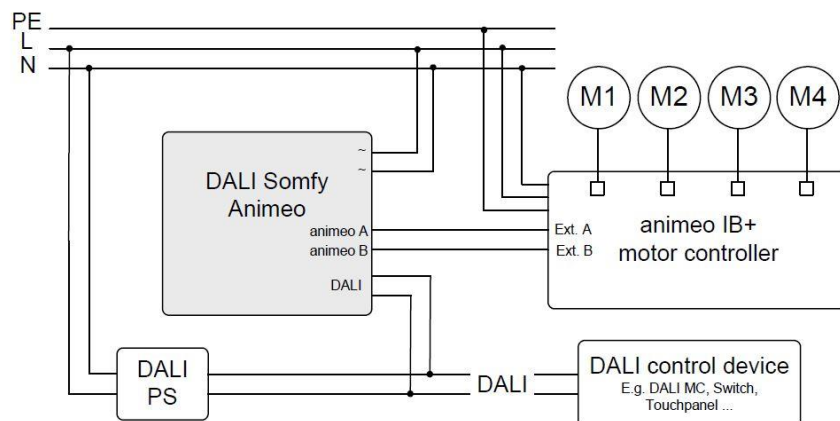
type	DALI Somfy
article number	86458491
electrical supply	220-240V 50/60Hz 20mA max
input	1 DALI
current consumption DALI line	6 mA
output	1 Somfy motor controller protocol
max. number of selectable motors	4
dimensions (LxWxH)	101.5mm x 51mm x 29.5mm
operating temperature	0°C-50°C
protection /safety class	IP20 / SKII
maximum connecting wire cross section	2.5 mm ²

Suitable for the following Somfy motor controllers:

- animeo IB+ 4AC motor controller (1860049, 1860081, 1860103, 1860108)
- animeo IB+ 4 DC motor controller (1860086)
- animeo IB+ DC/DC-E motor controller (1860087)

wiring diagram:





The polarity of the DALI-Somfy module (A,B) and the Somfy motor controller must be observed!



typical application

Supported DALI command set

Standard DALI command set		Description
Number	Name	
	DIRECT ARC POWER	The DAP command is forwarded to the motor controller interface as position. The angle remains unchanged. DALI DAP[0...254] -> position [0...100]
0	OFF	If motor is running: STOP, otherwise like DAP 0, different behaviour during tilt -> see device specific commands
1	UP	Blinds move to MAX LEVEL, different behaviour during tilt -> see device specific commands
2	DOWN	Blinds close completely, different behaviour during tilt -> see device specific commands
3	STEP UP	Not evaluated
4	STEP DOWN	Not evaluated
5	RECALL MAX LEVEL	if motor is running: STOP, otherwise the position stored as "MAX LEVEL" is approached. The angle remains unchanged (unless limited by the end positions in the motor controller), different behaviour during tilt -> see device specific commands
6	RECALL MIN LEVEL	if motor is running: STOP, otherwise the position stored as "MIN LEVEL" is approached. The angle remains unchanged (unless limited by the end positions in the motor controller), different behaviour during tilt -> see device specific commands
7	STEP DOWN AND OFF	Not evaluated
8	ON AND STEP UP	Same as UP
16...31	GOTO SCENE 0...15	Goes to a predefined scene value, a scene value consists of position and angle.
32	RESET	Reset to factory default (address not affected)
33	STORE ACTUAL LEVEL IN DTR	Stores the current position in the DTR and the current angle in a special "DTR-Tilt" register
42	STORE DTR AS MAX LEVEL	Stores the maximum position within the physical limits. The angle is not stored.
43	STORE DTR AS MIN LEVEL	Stores the minimum position within the physical limits. The angle is not stored.
64...79	STORE DTR AS SCENE 0...15	Stored the pre-programmed position. The angle is taken from the internal "DTR-Tilt" register and stored together with the scene value
80...95	REMOVE FROM SCENE 0...15	Stores 255 in the scene register
96...111	ADD TO GROUP 0...15	As per standard
112...127	REMOVE FROM GROUP 0...15	As per standard
128	STORE DTR AS SHORT ADDRESS	As per standard
144	QUERY STATUS	As per standard
145	QUERY BALLAST	Response is always YES
148	QUERY LIMIT ERROR	As per standard
149	QUERY RESET STATE	As per standard
150	QUERY MISSING SHORT ADDRESS	As per standard
151	QUERY VERSION NUMBER	Response is always 0
152	QUERY CONTENT DTR	As per standard
153	QUERY DEVICE TYPE	Response is always 0
154	QUERY PHYSICAL MINIMUM LEVEL	Response is always 1

155	QUERY POWER FAILURE	As per standard
160	QUERY ACTUAL LEVEL	Response is the current motor position 0...254
161	QUERY MAX LEVEL	0...254
162	QUERY MIN LEVEL	0...254
163	QUERY POWER ON LEVEL	Always MASK (255)
164	QUERY SYSTEM FAILURE LEVEL	Always MASK (255)
179...191	QUERY SCENE LEVEL	Response is the pre-programmed scene value (position)
192	QUERY GROUPS 0-7	As per standard
193	QUERY GROUPS 8-15	As per standard
194	QUERY RANDOM ADDRESS H	As per standard
195	QUERY RANDOM ADDRESS M	As per standard
196	QUERY RANDOM ADDRESS L	As per standard

The Special DALI command set for addressing (commands 256-269) are supported as defined in the standard. Physical addressing method is not possible.

Device specific command set

The response of the DALI Somfy animeo interface to some DALI commands is different from those specified in the official DALI standard. These commands have the following meanings:

Blind is tilting and the following DALI commands are sent: OFF/DOWN/RECALL MIN	moves to the lower end position	Makes a small positive angle movement
Blind is tilting and the following DALI commands are sent: UP/ ON AND STEPUP / RECALL MAX	moves to the upper end position or MAX LEVEL	makes a small negative angle movement

FADE TIME, FADE RATE – the values are accepted and stored but have no effect on the blind movement

RECALL MAX, RECALL MIN, OFF – if one of the commands is received while the motor is running, the motor will stop. The result is the following behaviour: Briefly pressing a button starts the motor, pressing the button again stops the motor (different behaviour during tilt -> see ergonomics).

UP, DOWN – A single UP/DOWN command moves the motor to the relevant end position unless the blind is tilting. If the blind is tilting the motor is switched on for 150ms (tilt mode).

Storing blind angle in scenes

A scene value consists of a position and angle. A special internal DTR register (DTR-Tilt) is used for the angle. When a scene is recalled the blind moves to the position and the angle stored for this scene.

The process STORE ACTUAL LEVEL IN DTR (stores the angle in the DTR-Tilt) followed by STORE DTR AS SCENE stores both the position and the angle.

US/EU ergonomics

Ergonomics determine the behaviour of the blind during tilting. Ergonomics can be selected with the aid of the DALI-Cockpit software tool.

Additional Information

Datasheets and manuals

<https://jumitech/produkter>

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

<http://lunatone.at/en/downloads/Lunatone-DALI-Cockpit.zip>

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