

## BL-204-10-868 ECG FLEX, EnOcean DALI controller

Light control, freely configurable with PC software BL-PC-FLEX-2

Item no.: 12136

Interfaces:

1x DALI master, 1x EnOcean bi-directional, supply voltage: 230 V AC



# DALI

The EnOcean DALI controller type **BL-204-10-868 EVG FLEX** offers a DALI master and an integrated DALI power supply unit for the direct connection of up to 15 slaves (I<sub>out</sub> max. = 30 mA) without the need for a separate DALI power supply unit.

An EnOcean radio transceiver is also integrated. These features enable the simple and trouble-free combination of DALI ballasts or DALI LED drivers and light switches with wireless EnOcean technology. The device is supplied with 230 V AC mains voltage.

Up to 4x 4 = **16 wired switches or push-buttons can** be read into the DALI bus of the BL-204-10-868 ECG FLEX **additionally** or alternatively via the AL-500-00 DALI input module 4-channel (art. no. 12002) and used locally for control.

In addition, this switching information is sent via EnOcean as RPS radio telegrams to control external actuators or to link other lighting control systems.

The controller offers **freely configurable functions** via the **BL-PC-FLEX-2** PC tool.

## Technical data

### Interfaces

Type	DALI Master
Quantity	1
Output current	Max. 30 mA (15 slaves)
Output voltage	Type. 16V DC (+/- 5%)
Galvanic isolation	Yes

Type	EnOcean
Quantity	1
Transmit/receive center frequency	868.0 MHz / ASK
Frequency range used	868.0 - 868.6 MHz
Maximum transmission power	Type. 3 dBm @ 868.300 MHz
Receiver category according to EN	2

### User interfaces

Service button	Yes, 1, in the front of the
Service LED	1x, red

### Housing / connection technology

Connection technology	Spring terminals, push-in, max. 1.5mm <sup>2</sup> rigid, max. 1.0mm <sup>2</sup> flexible with ferrules
Housing	UL-V0, light gray

### Supply

Supply voltage	230 V AC
Power consumption	Typ. 0.8 W, max 2.0 W

### Ambient conditions

Operating	+5°..+50°C
Storage temperature	-20°..+70°C
Air humidity	10..95% relative humidity, non-condensing
Protection class	IP20

### Dimensions and weight

Weight	55g
Dimensions	148 x 21 x 19 mm

### Tests / approvals

CE	2014/53/EU RED Directive 2011/65/EU RoHS Directive
Examinations	EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + AC:2011 + A2:2013 EN 61000-6-2:2019-11 EN 61000-6-3:2022-06 EN 61000-3-3:2023-02 EN 61000-4-7:2009-12 ETSI EN 300 220-2 V3.2.1 (2018-06) ETSI EN 301 489-1 V2.2.3 (2019-11)

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**Table of supported EEP (EnOcean Equipment Profile) (as of 29.04.2020)**


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No. No.	EEP	Description
1	F6-02-01	Light and Blind Control - Application Style 1
2	F6-02-02	Light and Blind Control - Application Style 2
3	F6-02-03	Light Control - Application Style 1
4	A5-07-01	Occupancy with Supply voltage monitor
5	A5-07-02	Occupancy with Supply voltage monitor
6	A5-07-03	Occupancy with supply voltage monitor and 10-bit illumination measurement
7	A5-06-01	Light Sensor, range 300lx to 60.000lx
8	A5-06-02	Ligth sensor, range 0lx to 1.020lx
9	A5-08-01	Range 0lx to 510lx, 0°C to +51°C and Occupancy Button

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**Brief description**


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**Power supply**

The BL-204-10-868 ECG FLEX is supplied with mains voltage (230 V AC).

**DALI Master**

The BL-204-10-868 ECG FLEX offers a DALI master in accordance with the DALI specification. A DALI power supply unit for the direct connection of up to 15 slaves is also integrated in the device ( $I_{max} = 30 \text{ mA}$ ). No separate DALI power supply unit is required.

**EnOcean Master / bi-directional**

The integrated TCM310 transceiver enables communication with EnOcean sensors, actuators and the BL-PC-FLEX-2 software (formerly BL-PC-FLEX), for example.

**Service button / Service LED**

The BL-204-10-868 ECG FLEX has a service button. This currently has no function. Various status information is displayed via the red service LED integrated in the front.

**Evaluation of wired switches and push-buttons via DALI**

The BL-204-10-868 EVG FLEX supports the reading of up to 16 conventional switches and push-buttons via the DALI. A module of type AL-500-00 DALI input module 4-channel, art. no. 12002, is required for up to 4 signals.

## Functions of the control unit

### Evaluation of wireless sensors for lighting control

The EnOcean DALI controller **type BL-204-10-868 EVG FLEX** is configured wirelessly via an EnOcean USB stick using the BL-PC-FLEX-2 PC software (formerly BL-PC-FLEX). It currently supports the use of light switches, light switches, motion detectors and daylight sensors based on EnOcean.

### Additional evaluation of wired switches and push-buttons

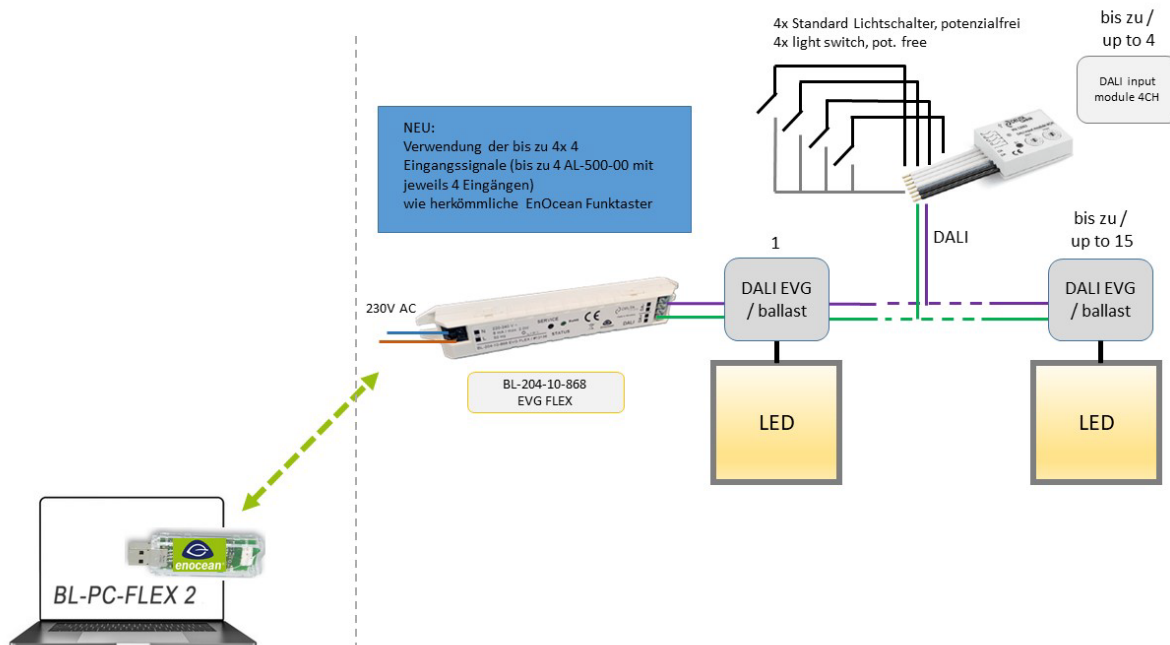
In contrast to the **BL-202-10-868 EVG FLEX**, the **BL-204-10-868 EVG FLEX** also supports the reading of switch signals via the DALI bus. For this purpose, up to 4 AL-500-00 DALI input modules 4-channel can be connected to the DALI, art. no. 12002.

These are supplied with power via the DALI bus and make the 4 input channels A-D available in the BL-PC-FLEX-2 software as "virtual" EnOcean switches.

The EnOcean ID of the switch corresponds to the BASE ID of the EnOcean transceiver of the BL-204-10-868 EVG FLEX.

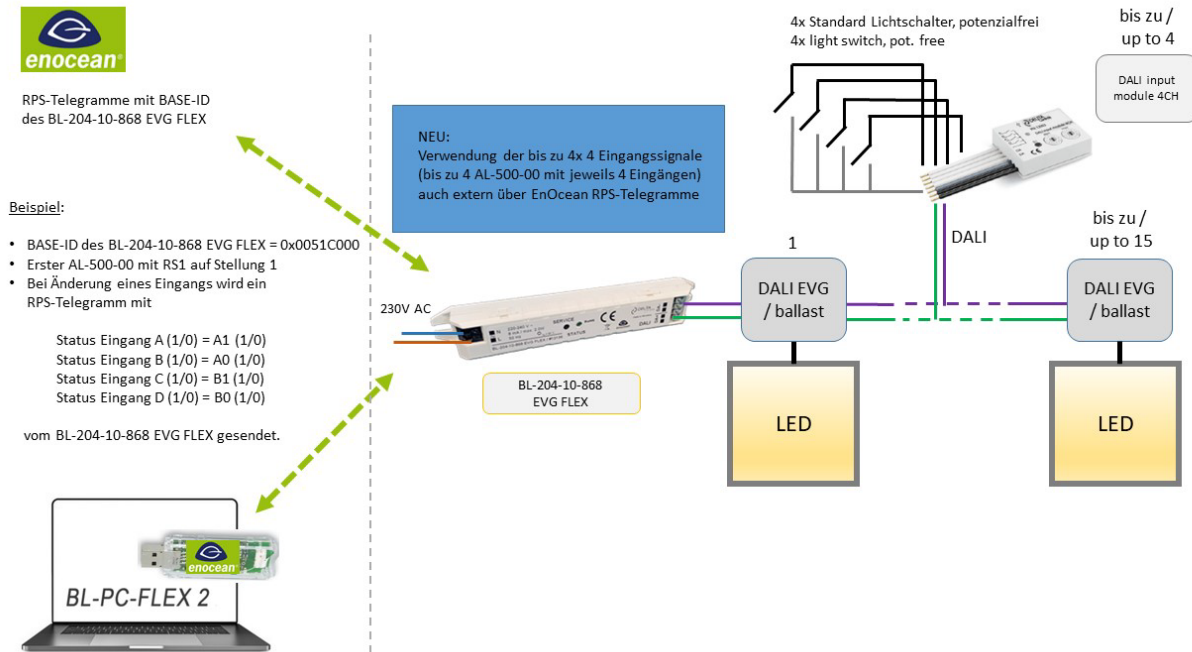
#### Example 1:

Only wired function and evaluation of the AL-500-00 DALI input module 4-channel, no external integration via EnOcean



**Example 2:**

Wired and wireless function and evaluation of the AL-500-00 DALI input module 4-channel, external  
Integration of actuators via EnOcean



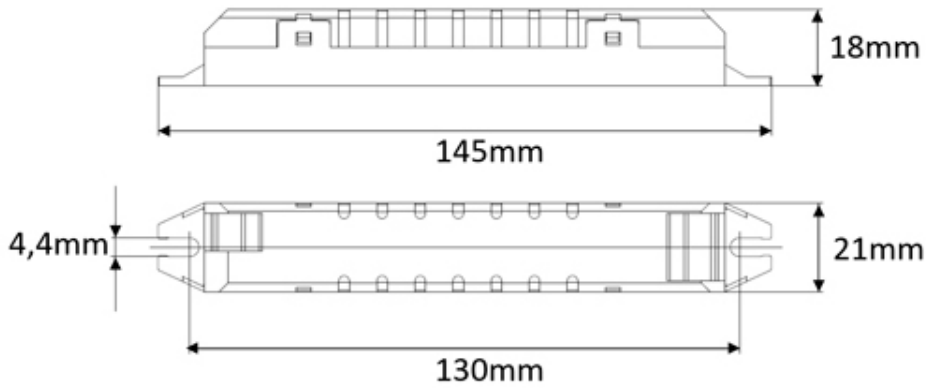
**Tabular overview of the generated EnOcean RPS telegrams**

**Assumption:** BASE-ID of the BL-204-10-868 EVG FLEX = n

Position of the RS1 rotary switch on the AL-500-00 DALI input module 4-channel	Input channel (A-D)	Telegram / Status	EnOcean ID of the telegram
1	A is closed	Button <b>A1</b> (actuated)	n
1	A is opened	Not actuated	n
1	B is closed	Button <b>A0</b> (actuated)	n
1	B is opened	Not actuated	n
1	C is closed	Button <b>B1</b> (actuated)	n
1	C is opened	Not actuated	n
1	D is closed	Button <b>B0</b> (actuated)	n
1	D is opened	Not actuated	n
2	A is closed	Button <b>A1</b> (actuated)	n+1
2	A is opened	Not actuated	n+1
2	B is closed	Button <b>A0</b> (actuated)	n+1
2	B is opened	Not actuated	n+1
2	C is closed	Button <b>B1</b> (actuated)	n+1
2	C is opened	Not actuated	n+1
2	D is closed	Button <b>B0</b> (actuated)	n+1
2	D is opened	Not actuated	n+1
3	A is closed	Button <b>A1</b> (actuated)	n+2
3	A is opened	Not actuated	n+2
3	B is closed	Button <b>A0</b> (actuated)	n+2
3	B is opened	Not actuated	n+2
3	C is closed	Button <b>B1</b> (actuated)	n+2
3	C is opened	Not actuated	n+2
3	D is closed	Button <b>B0</b> (actuated)	n+2
3	D is opened	Not actuated	n+2
4	A is closed	Button <b>A1</b> (actuated)	n+3
4	A is opened	Not actuated	n+3
4	B is closed	Button <b>A0</b> (actuated)	n+3
4	B is opened	Not actuated	n+3
4	C is closed	Button <b>B1</b> (actuated)	n+3
4	C is opened	Not actuated	n+3
4	D is closed	Button <b>B0</b> (actuated)	n+3
4	D is opened	Not actuated	n+3

Please refer to the documentation for the BL-PC-FLEX-2 software, which you can find on our homepage at [www.deuta-controls.net](http://www.deuta-controls.net), for the full range of functions of the control unit, such as scene control, timer and switching functions. If you have installed the software, you can find the manuals by calling up the "Show help" function.

## Dimensions



## Order information

Article text	Order number	Description
BL-204-10-868 EVG FLEX	12136	EnOcean DALI controller BL-204 series Function: Freely configurable with BL-PC-FLEX-2 software 230 V AC, 868MHz, ECG housing

## EU Declaration of Conformity

Hereby, DEUTA Controls GmbH declares that the radio equipment type **BL-204-10-868 EVG FLEX** is in compliance with Directive 2014/53/EU. The full text of the EU Declaration of Conformity is available at the following Internet address: [www.deuta-controls.de](http://www.deuta-controls.de) in the Service/Downloads section (Doc. EUDC2024\_103).

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