BL-201

EnOcean-DALI-Gateway, series BL

Interfaces: 1x DALI master, 1x EnOcean master bi-directional

Supply voltage: 230 V AC

The BL-201 EnOcean-DALI-Gateway provides one DALI master with an integrated DALI power supply for the direct connection of up to 10 slaves (Iout max.= 20 mA), without a separate DALI power supply. Also an EnOcean wireless transceiver is integrated. This allows the smart and easy integration and combination of DALI ballasts and EnOcean wireless technology. The BL-201 is supplied by 230 V AC line voltage.

Technical data

Interfaces and I/O

DALI master

Number	1 (master)
Output current DALI	Max. 20mA
Output voltage	16V DC (+/- 5%)
Galvanic isolation	Yes
Connection technology	2 screw terminals, max. 1.5mm^2 inflexible, max. 1.0mm^2 flexible with cable end sleeves

EnOcean master

Number	1 (master, bi-directional)
Transceiver	TCM310
Transmit / receive	Yes / yes
Antenna	Integrated

Power supply

Supply voltage	230 V AC

User interfaces

Service button	1
Service LED	1, red

Environmental conditions

Supply voltage	230 V AC / 50 Hz
Power consumption	Typ. 1.4 W, max. 2.0 W
Operating temperature	+5°C to +50°C
Storage temperature	+5°C to +50°C
Humidity	10% to 95%, non condensing

Standards

EN	EN 61000-6-2 EN 61000-6-3 EN 60950:2011
Approvals	CE

Short description

Power supply

The BL-201 is supplied directly by line voltage (230 V AC).

DALI master

The BL-201 provides a DALI master according to the DALI specification. Also a DALI power supply for direct connection of up to 10 slaves is integrated (Imax = 20 mA).

EnOcean Master / bi-directional

The integrated transceiver TCM310 allows the bi-directional communication with EnOcean sensors and control units according to the EnOcean profile specification EEP 2.1.

Service button / service LED

BL-201 has a service button to teach in a sensor or a control unit.
By the internal red service LED, several status information will be displayed.

Functionality of the Gateway / software options

There are different software options available. The hardware is always the same, different functionality is always realized by adopted software. BL-201 can be controlled by an EnOcean switch or also by a control unit. Functionality is described as follows:

SW-Option **V00** (BL-201-**00**-868): Single rocker to control DALI ballasts **On / Off / Dim** via broadcast

Push service button <= 1 sec.:	Sets BL-201 into learn-mode, service LED is steady on:
	a) EnOcean switch is pressed: Switch is paired with BL-201
	b) Control Unit sends a telegram according EEP "A5-38-9": Control Unit is paired
Push Service button >=2 sec.:	Service-LED will turn on for 1 sec.: No more switch / control unit is paired with the BL-201.
Keypress rocker top short:	Switch on all ballasts on DALI line
Keypress rocker bottom short:	Switch off all ballasts on DALI line
Keypress rocker top long:	Brighten of ballasts until key is released or 100% is reached.
Keypress rocker bottom long**:**	Dim of ballasts until key is released or 0% is reached.
Control unit sends telegram:	Data byte 2 of the telegram will be send to the DALI slaves by DALI DAPC / broadcast command to dim all connected slaves (0x00 = 0% dim level, 0xFE = 100%).

Option **V01** (BL-201-**01**-868): Double-rocker to control 2 addressed DALI ballasts, **no broadcast**, for example **cold / warm** white:
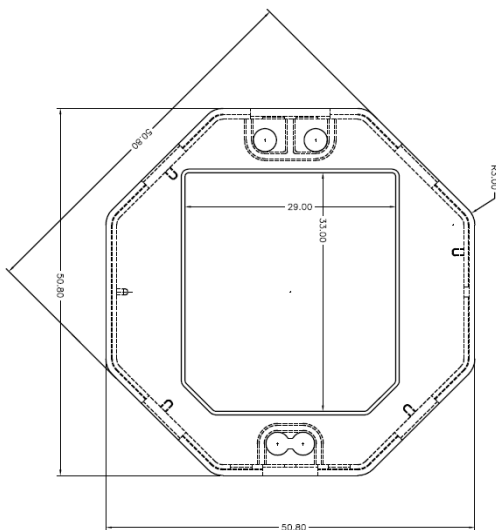
Push service button <= 1 sec.:	Sets BL-201 into learn-mode, service LED is steady on:
	EnOcean switch is pressed: Switch is paired with BL-201
Push Service button >=2 sec.:	Service-LED will turn on for 1 sec.: No more switch / control unit is paired with the BL-201.
Push Service button >=5 sec.:	Service-LED will turn on again for 1 sec.: DALI slaves will be addressed. First two addresses on the DALI line will be configured to address 0 and 1.
Keypress, **rocker 1 / 2**, short top	Switch on ballast with **address 0 / 1** on DALI line
Keypress, **rocker 1 / 2**, short bottom:	Switch on ballast with **address 0 / 1** on DALI line
Keypress, **rocker 1 / 2**, long top:	Brighten of ballast with **address 0 / 1** until key is released or 100% is reached.
Keypress, **rocker 1 / 2**, long bottom**:**	Dim of ballasts with **address 0 / 1** until key is released or 0% is reached.

Option **V02** (BL-201-**02**-868): Control unit interface, Device Type 8, Colour Control, RGBW via broadcast:

Push service button <= 1 sec.:	Sets BL-201 into learn-mode, service LED is steady on. Control unit sends a telegram according to EEP "A5-38-9" -> control unit is paired
Push Service button >=2 sec.:	Service-LED will turn on for 1 sec.: No more control unit is paired with the BL-201.
Control unit sends telegram:	Function code 7: RGB value of the received frame is send to all connected Device Type 8 DALI slaves as dim level via broadcast command.
	Function code 6: Data byte 3 is used as fading time for all following colour transitions.

Option **V03** (BL-201-**03**-868): Control unit interface for RGB lights:

Push service button <= 1 sec.:	Sets BL-201 into learn-mode, service LED is steady on:
	a) EnOcean switch is pressed: Switch is paired with BL-201 b) Control Unit sends a telegram according EEP "A5-38-9": Control Unit is paired
Push Service button >=2 sec.:	Service-LED will turn on for 1 sec.: No more control unit is paired with the BL-201.
Push Service button >=5 sec.:	Service-LED will turn on again for 1 sec.: DALI slaves will be addressed. First three addresses on the DALI line will be configured to addresses 0 to 2. In case of a combined RGB slave, this is usually as follows: 0=R, 1=G, 2=B.
Keypress rocker top short:	Switch on all ballasts on DALI line. Colour has to be controlled and set up by a control unit.
Keypress rocker bottom short:	Switch off all ballasts on DALI line. Colour has to be controlled and set up by a control unit.
Keypress rocker top long:	Brighten of ballasts until key is released or 100% is reached. Colour has to be controlled and set up by a control unit.
Keypress rocker bottom long**:**	Dim of ballasts until key is released or 0% is reached. Colour has to be controlled and set up by a control unit.
Control unit sends telegram:	Function code 7: RGB value of the received is send to all connected DALI slaves as dim level: DB3 / red to DALI Adr. 0, DB2 / green to DALI adr. 1 and DB1 / blue to DALI adr. 2. Function code 6: Data byte 3 is used as fading time for all following colour transitions (broadcast).

Dimensions : 51 x 51 x 33 mm

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Technical data might change

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Ordering information for BL-201

Short text	Ordering number	Description
BL-201-00-868	11042	BL-201 EnOcean-DALI-Gateway, SW option **00: On / Off / Dim** 230 V AC, 868 MHz, in-wall housing
BL-201-01-868	10945	BL-201 EnOcean-DALI-Gateway SW option **01: Cold / warm** 230 V AC, 868 MHz, in-wall housing
BL-201-02-868	10985	BL-201 EnOcean-DALI-Gateway SW option **02: Device Type 8 / RGBW** 230 V AC, 868 MHz, in-wall housing
BL-201-03-868	11064	BL-201 EnOcean-DALI-Gateway SW option **03: RGB** 230 V AC, 868 MHz, in-wall housing

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