Connection Boxes

QCB02/BLE series ▼

*White color housing by default. Black color housing can be supplied upon request.
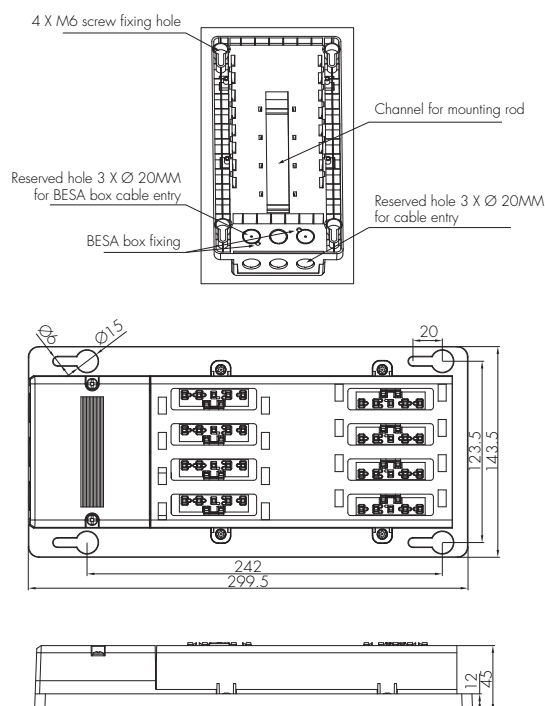
Key Features

- Dimmable control applications (DALI/DALI-2 or 0/1-10V)
- Intelligent control with Bluetooth 5.0 SIG mesh module built in
- 4 types of built-in Bluetooth 5.0 control module to select from
- Detailed Bluetooth system features can be viewed on page 05-11
- Luminaire outlet: Wago 5-pole terminal base (L', N, E, Dim+, Dim-)
- Black housing and white housing available to choose from
- Tamper-proof structure design
- Expandable: easy extension to another QCB02/BLE wirelessly
- Rating of system - - -

  QCB02/BLE-D2: Max. 100mA DALI/DALI-2 power supply

  QCB02/BLE-DCA & QCB02/BLE-DTY: Max. 100mA DALI/DALI-2 power supply

  QCB02/BLE-V: Default rating is 400VA capacitive & 800W resistive. Max 10A can be supplied as a special version upon request

- Flame-retardant material for safety protection

Your Benefits

- Five types of installation methods meets different project needs
- Reduce labour hours and labour cost significantly
- Simple and intuitive wiring connections
- Improved safety level during wiring operations
- Clear and clean wiring makes it easy for future maintenance
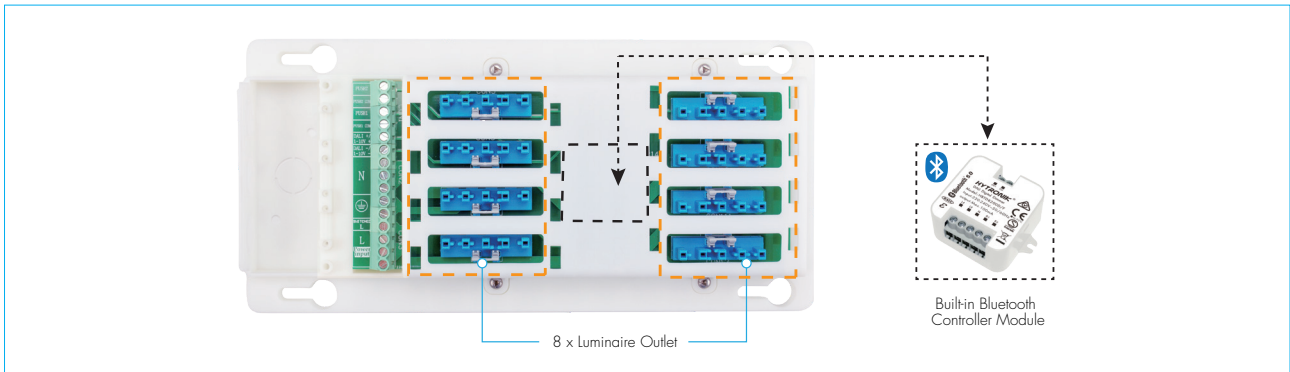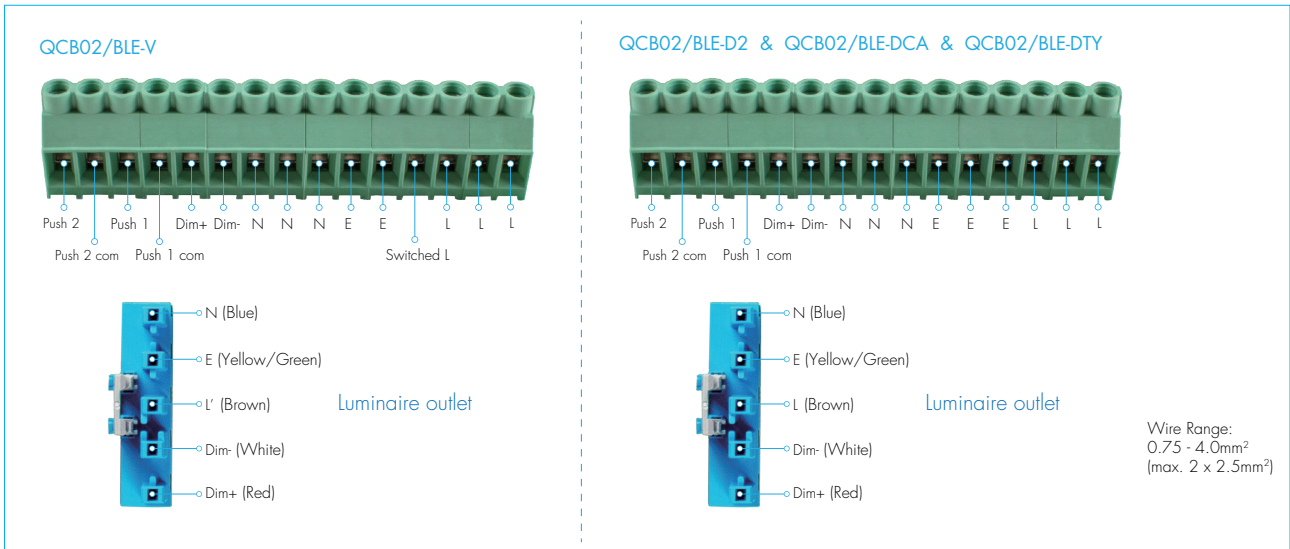- Can be supplied with pre-wired cables

Dimensions (mm) :

4 X M6 screw fixing hole

Channel for mounting rod

Reserved hole 3 X Ø 20MM for BESA box cable entry

Reserved hole 3 X Ø 20MM for cable entry

BESA box fixing

Ø15
20
123.5
143.5
242
299.5
12
45

Ordering data :

QCB02/BLE series
Four built-in module options

Model name	Description
QCB02/BLE-V	(Built-in Bluetooth module code: HBTD8200V/F) 0/1-10V output Default rating 400VA capacitive & 800W resistive. Dimmable control with corridor function
QCB02/BLE-D2	(Built-in Bluetooth module code: HBTD8200D/F) DALI / DALI-2 output Max. 100mA DALI/DALI-2 power supply. DT8: Dimmable & Color Tunable
QCB02/BLE-DCA	(Built-in Bluetooth module code: HBTD8200D/F/CA) DALI / DALI-2 output Max. 100mA DALI/DALI-2 power supply. DT8: Dimmable & Color Tunable, Casambi Enabled
QCB02/BLE-DTY	(Built-in Bluetooth module code: HBTD8200D/F/TY) DALI / DALI-2 output Max. 100mA DALI/DALI-2 power supply. DT8: Dimmable & Color Tunable, Tuya Enabled

Input & Output Terminal Function

QCB02/BLE-V

Push 2 | Push 1 | Dim+ | Dim- | N | N | N | E | E | L | L | L

Push 2 com | Push 1 com | Switched L

- N (Blue)
- E (Yellow/Green)
- L' (Brown) — Luminaire outlet
- Dim- (White)
- Dim+ (Red)

QCB02/BLE-D2 & QCB02/BLE-DCA & QCB02/BLE-DTY

Push 2 | Push 1 | Dim+ | Dim- | N | N | N | E | E | E | L | L | L

Push 2 com | Push 1 com

- N (Blue)
- E (Yellow/Green)
- L (Brown) — Luminaire outlet
- Dim- (White)
- Dim+ (Red)

Wire Range:
0.75 - 4.0mm²
(max. 2 x 2.5mm²)

8 x Luminaire Outlet

Built-in Bluetooth Controller Module

In the middle of the QCB02/BLE there is a pre-installed Bluetooth 5.0 SIG mesh controller module. We offer 4 types of different controller modules for users to choose from.For each controller module, all the 8 luminaire outlets as regarded as one channel (1 x 8).

Default max rating for **QCB02/BLE-D2 & QCB02/BLE-DCA & QCB02/BLE-DTY** is 100mA;

Default max rating for **QCB02/BLE-V** is 400VA Capacitive & 800W Resistive. Max 10A can be supplied as a special version upon request.
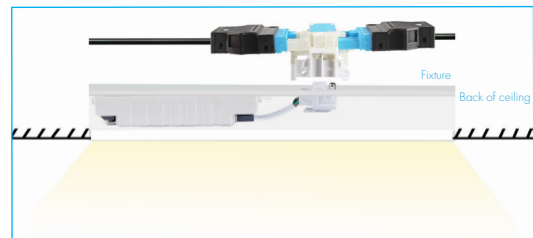
Connecting to [linect] System!

QCB02/BLE products are also able to be integrated to Linect connection [linect] system. With the T-connector module, connection to luminaires can be easily extended (luminaire needs to be [linect] connection enabled).

Fixture

Back of ceiling
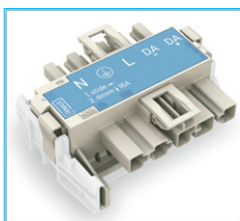
Wago 5 pole Linect® T-connector
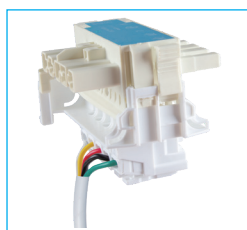
Prewired Wago 5 pole Linect® T-connector

Install to luminaires to achieve easy extension

What's so Helpful about QCB02/BLE Series Bluetooth "Intelligent" Control ?

(For Casambi's and Tuya's products, they have overall pretty much similar benifits and capabilities but still vary from one to another when it comes to the details. Users can always refer to Casambi's or Tuya's corresponding Bluetooth system to learn their capabilities and differences accordingly)

1. User enjoys the full set of powerful Bluetooth features
(see page 05-11 for details).

2. When used with Hytronik's Bluetooth on/off motion sensor, the Bluetooth sensor can control all the luminaires wirelessly without needing to be hard-wired to the QCB02/BLE.

Ceiling rose

Wireless up to 30m range

Wireless up to 30m range

Ceiling rose

HBIR28

HBIR28
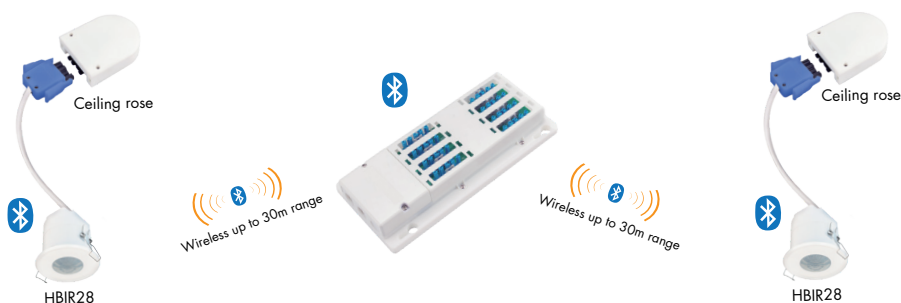
Hytronik's Bluetooth sensor can be plugged to a nearest ceiling rose, without needing to connect a long cable to the QCB02/BLE. This Bluetooth sensor will be able to wirelessly control all the luminaires that are connected to the QCB02/BLE. This is extremely useful by saving long cable wirings when there are multiple Bluetooth sensors controlling a same group of luminaires.

Thanks to the built-in Bluetooth 5.0 controller, QCB02/BLE is born to comes with dimming output to the luminaires (namely, **QCB02/BLE-V** provides 0/1-10V output, **QCB02/BLE-D2** provides DALI/DALI-2 output. So the sensor only needs to be a non-dimmable on/off sensor that just picks up motion and sends out trigger signal via Bluetooth, and all the dimming controls will be performed by the QCB02/BLE box itself.

This makes sensor selections easy and cost-effective, aiming to cut the budget cost and reduce sensor model inventories for users.

Dimming Control Capability			
		QCB02/BLE-V (0/1-10V output)	QCB02/BLE-D2 (DALI/DALI-2 output)
With Hytronik's On/Off Bluetooth sensor HBIR28	Lux on/off control	√	√
	Tri-level control (Corridor function)	√	√
	Daylight harvest control (Daylight regulating/interation)	√	√
	Color tuning control		√
	Circadian rhythm control (Human Centric Lighting)		√

Besides, there will be no requirement for the sensor's loading capability. Sensor just picks up motion and sends trigger signal via Bluetooth, the loading capability is purely determined by QCB02/BLE, which depends on internal control module selections. For **QCB02/BLE-D2**, the max. DALI power supply is 100mA; and for **QCB02/BLE-V**, the max. rate is 400VA capacitive & 800W resistive by default, and a special version of max 10A can be supplied upon request if higher loading capability is required. In other words, the sensor's loading capability can be as small as possible to save project cost, as 1A and 10A have no differences at all in this case.

What's so Helpful about QCB02/BLE's & QCB03/BLE's

Bluetooth "Intelligent" Control **?**

3. When used with an ordinary non-Bluetooth on/off motion sensor (can be Hytronik's sensor or can be from any third-party), the built-in Bluetooth 5.0 controller "upgrades" this ordinary on/off sensor to a Bluetooth smart control sensor, with tri-level control dimming control.

With a built-in Bluetooth 5.0 controller in QCB02/BLE, an ordinary motion sensor can be "upgraded" to Bluetooth smart control using an App feature called "Sensor-link ", which is easily achieved by wiring the L' of the ordinary sensor to the PUSH terminal of the QCB02/BLE. With this feature, the motion sensor works normally while the advanced Bluetooth control features such as scheduling, timer & recall scenes will all perform well at the same time.

Meanwhile, another great thing about "Sensor-link" feature is that, it will "upgrade" an on/off motion sensor to have tri-level dimming function (corridor function)! The on/off sensor that just picks up motion and sends out trigger signal via Bluetooth, and tri-level dimming control will be performed by the QCB02/BLE box

itself and users can set up stand-by parameters in the app freely. This makes sensor selections easy and cost-effective, aiming to cut the budget cost and reduce sensor model inventories for users.

Besides, there will be no requirement for the sensor's loading capability. Sensor just picks up motion and sends trigger signal, the loading capability is purely determined by the QCB02/BLE, which depends on internal control selections. For **QCB02/BLE-D2**, the max. DALI power supply is 100mA; and for **QCB02/BLE-V**, the max. rate is 400VA capacitive & 800W resistive by default, and a special version of max 10A can be supplied upon request if higher loading capability is required. In other words, the sensor's loading capability can be as small as possible to save project cost, as 1A and 10A have no differences at all in this case.

4. Traditional way to extend number of luminaire outlets requires hard-wiring from one box to another. Now thanks to the Bluetooth mesh network, QCB02/BLE can be easily extended to another QCB02/BLE wirelessly!

5. QCB02/BLE can be wirelessly controlled by an EnOcean Bluetooth self-powered switch or Hytronik's Bluetooth touch panel HBP02.

Wireless up to 30m range

Fully support EnOcean self-powered switch module PTM215B (HBES01/W & HBES01/B)

Touch Panel HBP02