HYTRONIK ®

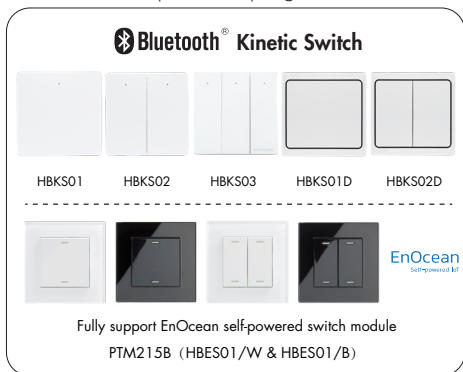🚀 ⚛ CE RED UK CA

Product Description

HBTD8200VFC/F is designed to fit into a junction box or electrical box to make Push switch (retractive switch) to achieve on/off control. HBTD8200VFC/F can choose from a variety of free voltage loads. It has NO and NC Relay suitable for various alarm systems or BMS signal access. Whether used for new build or retro-fit projects to add intelligent control to standard lighting fixtures, HBTD8200VFC/F does it all. Simple device setup and commissioning can be done via **Koolmesh**® app.

App Features

- 🔄 Quick setup mode & advanced setup mode
- 🖥 Web app/platform for project deployment & data analysis
- 📱 Koolmesh Pro app on iPad for on-site configuration
- 🗂 Floorplan feature to simplify project planning
- 🔑 One-key device replacement
- ⚙ Device social relations check
- 📲 Remote control via gateway support HBGW01
- 🔗 Grouping luminaires via mesh network
- ⬛ Scenes
- ⬜ Push switch configuration
- 📅 Schedule
- ☀ Astro timer (sunrise and sunset)
- 💡 Power-on status (memory against power loss)
- 📶 Offline commissioning
- 🗒 Bulk commissioning (copy and paste settings)
- 🔒 Different permission levels via authority management
- 🔗 Network sharing via QR code or keycode
- 🔄 Interoperability with Hytronik Bluetooth product portfolio
- 🖼 Compatible with EnOcean BLE switches
- 🖧 Internet-of-Things (IoT) featured
- ☁ Device firmware update over-the-air (OTA)
- 📦 Continuous development in progress…
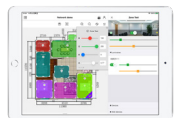
Hardware Features

- 🎚 VFC/F: Volt-free Contact/Dry Contact ON/OFF relay switch:
  - – 24VDC@2A, 48VDC@0.5A
  - – 250VAC@4A
- 🔀 Freely select NO or NC contact
- 📏 Compact design with two screw holes to be built inside luminaires
- ⬜ 1 Push input for flexible manual control
- 〰 Zero crossing detection circuit to reduce in-rush current and prolong relay lifetime
- 🛡 5-year warranty

🚀 **Bluetooth**® 5.0 SIG mesh

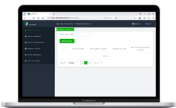Smartphone app for both iOS & Android platform

Koolmesh Pro app for iPad

Web app/platform: www.iot.koolmesh.com

🚀 **Bluetooth**® Kinetic Switch

| HBKS01 | HBKS02 | HBKS03 | HBKS01D | HBKS02D |

EnOcean Self-powered IoT

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

Technical Specifications
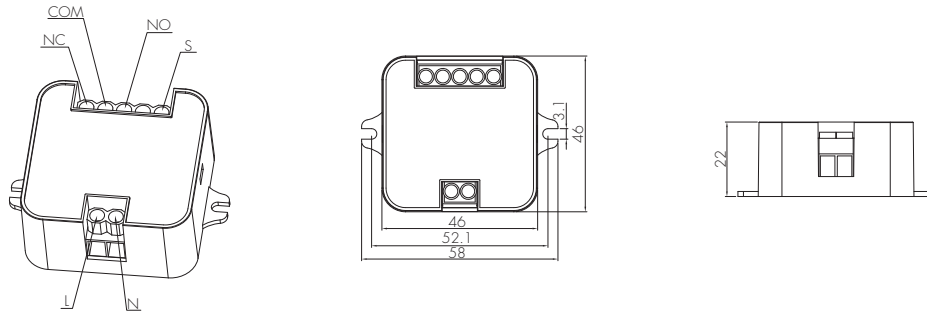
Bluetooth Transceiver	
Operation frequency	2.4 GHz - 2.483 GHz
Transmission power	4 dBm
Range (Typical indoor)	10~30m
Protocol	❁ Bluetooth® 5.0 SIG Mesh

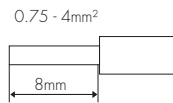| Input & Output Characteristics	
Operating voltage	220~240VAC 50/60Hz
Stand-by power	<0.5W
Load ratings	24VDC@2A,48VDC@0.5A 250VAC@4A

Environment	
Operation temperature	Ta: -20°C ~ +45°C
Case temperature (Max.)	Tc: +75°C
Storage temperature	-40°C ~ 70°C
Relative humidity	10 ~ 90%
IP rating	IP20
Insulation	Class II

Safety & EMC	
EMC standard (EMC)	EN55015, EN61547,EN62479, EN61000
Safety standard (LVD)	IEC/EN 61058, AS/NZS 61058
Radio Equipment (RED)	EN300 328, EN301489-1/-17, EN62479
Certification	Semko, CB, CE , EMC, RED, RCM,UKCA

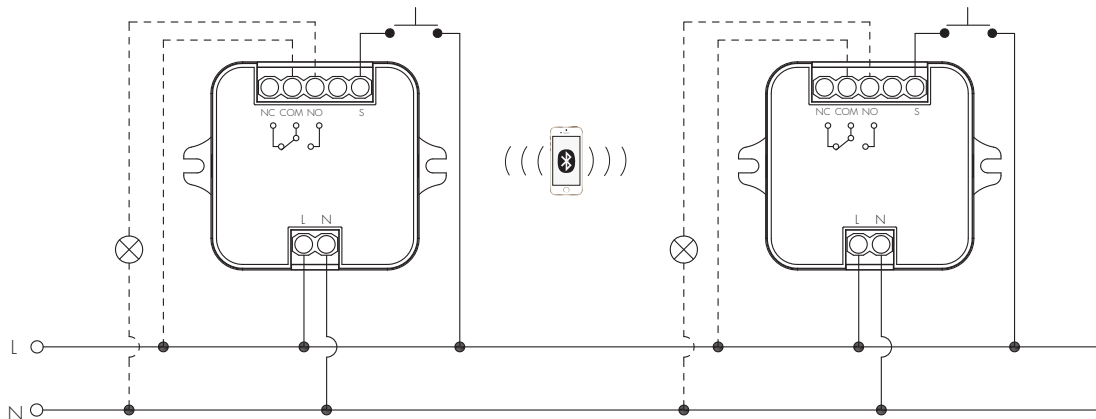## Mechanical Structure & Dimensions

Wire Preparation

0.75 - 4mm²

8mm

To make or release the wire from the terminal, use a screwdriver to push down the button.

Wiring Diagram

Original status (stand-by)

Dimming Interface Operation Notes

Switch-Dim

The provided Switch-Dim interface allows for a simple dimming method using commercially available non-latching (momentary) wall switches. Detailed Push switch configurations can be set on Koolmesh app.

Switch Function	Action	Descriptions
Push switch	Short press (<1 second) * Short press has to be longer than 0.1s, or it will be invalid.	- Turn on/off - Recall a scene - Turn on only - Quit manual mode - Turn off only - Do nothing
	Double push	- Turn on only - Quit manual mode - Turn off only - Do nothing - Recall a scene
	Long press (≥1 second)	- Dimming - Colour tuning - Do nothing
Sensor-link	/	- Upgrade a normal on/off motion sensor to a Bluetooth controlled motion sensor
Emergency Self-Test Function	Short press (<1 second) * Short press has to be longer than 0.1s, or it will be invalid.	- Start Self test (Monthly) - Start Self test (Annually) - Stop Self test - Invalid
	Long press (≥1 second)	- Start Self test (Monthly) - Start Self test (Annually) - Stop Self test - Invalid
Fire Alarm (VFC signal only)	Refer to **Koolmesh**™ App User Manual V2.1	- Able to connect the Fire Alarm system - Once the fire alarm system is triggered, all the luminaries controlled by the Push Switch will enter the preset scene (normally it's full on), after the fire alarm system gives the ending signal, all the luminaries controlled by this Push Switch will revert back to normal status.

Additional Information / Documents

1. To learn more about detailed product features/functions, please kindly refer to
https://hytronik.com/product/hbtd8200vfc-f

2. Regarding precautions for Bluetooth product installation and operation, please kindly refer to
https://hytronik.com/service/downloads (Bluetooth Products Precautions for Product Iinstallation and Operation)

3. Data sheet is subject to change without notice. Please always refer to the most recent release on
https://hytronik.com/products/controllers-dimmers

4. Regarding Hytronik standard guarantee policy, please kindly refer to
https://hytronik.com/service/downloads (Guarantee Conditions document)