

Switch with  Bluetooth® 5.0 SIG Mesh

HBTD8200VFC

Bluetooth Voltage-free Contact Switch

HYTRONIK®



Product Description

HBTD8200VFC is designed to fit into a junction box or electrical box to make Push switch (retractive switch) to achieve on/off control. HBTD8200VFC 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 does it all. Simple device setup and commissioning can be done via **Koolmesh**® app.

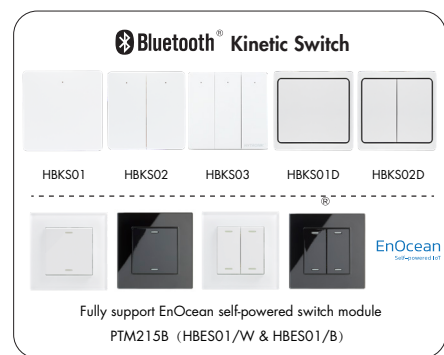


App Features

-  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: Volt-free Contact/Dry Contact ON/OFF relay switch:
 - 24VDC@2A, 48VDC@0.5A
 - 250VAC@4A
-  Freely select NO or NC contact
-  Compact design
-  1 Push input for flexible manual control
-  Zero crossing detection circuit to reduce in-rush current and prolong relay lifetime
-  5-year warranty



Technical Specifications

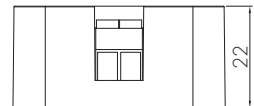
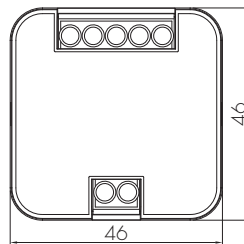
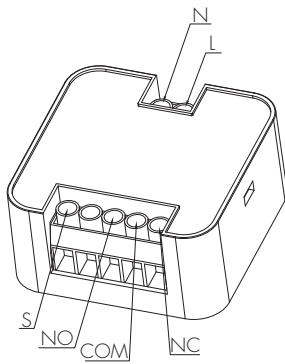
Bluetooth Transceiver	
Operation frequency	2.4 GHz - 2.483 GHz
Transmission power	4 dBm
Range (Typical indoor)	10~30m
Protocol	Bluetooth® 5.0 SIG Mesh

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

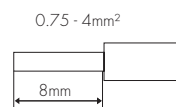
Input & Output Characteristics	
Operating voltage	220~240VAC 50/60Hz
Stand-by power	<0.5W
Load ratings	24VDC@2A, 48VDC@0.5A 250VAC@4A

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



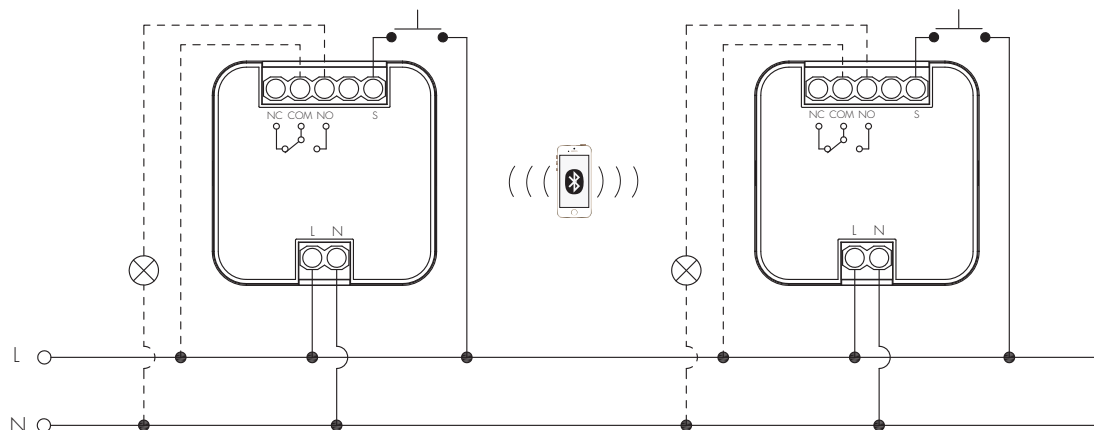
Wire Preparation



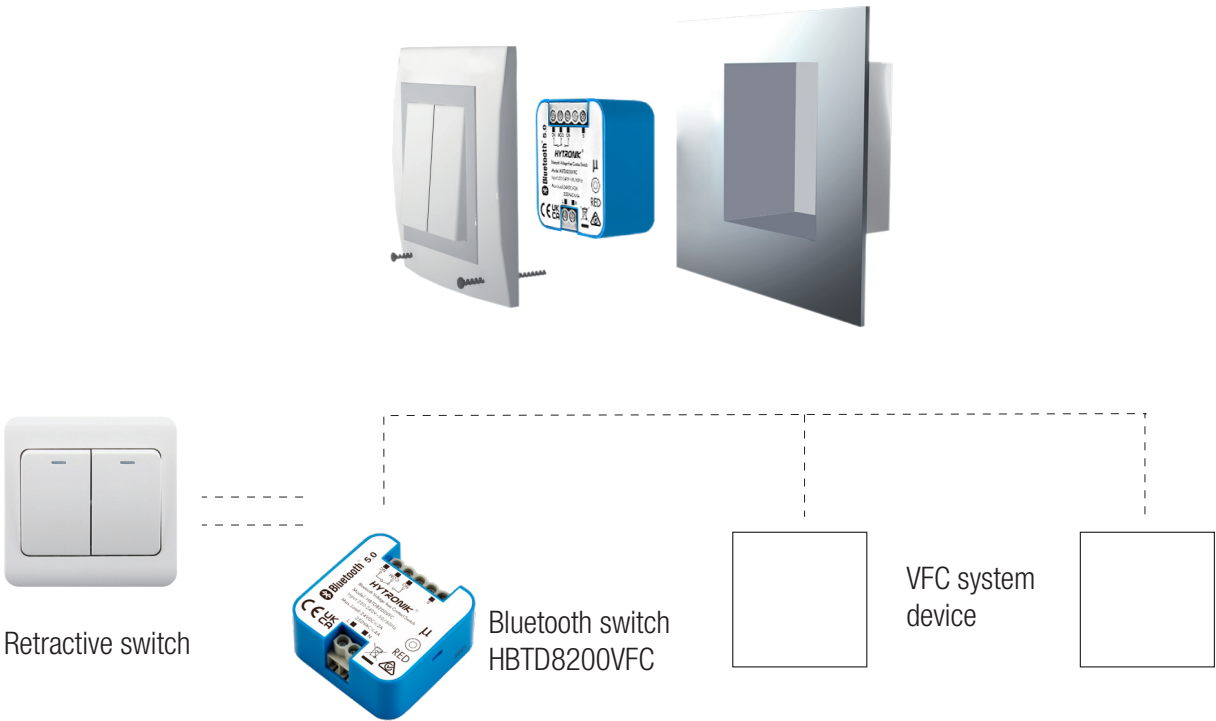
To make or release the wire from the terminal, use a screwdriver to push down the button.

Wiring Diagram

Original status (stand-by)



Installation Instructions



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 - Turn on only - Turn off only - Recall a scene - Quit manual mode - Do nothing
	Double push	- Turn on only - Turn off only - Recall a scene - Quit manual mode - Do nothing
	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) - Stop Self test - Start Self test (Annually) - Invalid
	Long press (≥1 second)	- Start Self test (Monthly) - Stop Self test - Start Self test (Annually) - 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>
2. Regarding precautions for Bluetooth product installation and operation, please kindly refer to
<https://hytronik.com/service/downloads> (Bluetooth Products Precautions for Product Installation 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)