Dimmer With Bluetooth® Wireless Technology
Socket Mounting / Flush Mounting

HYTRONIK ®

Socket mounting: HBTD8200D   HBTD8200V   HBTD8200T
Flush mounting: HBTD8200D/F HBTD8200V/F HBTD8200T/F

CE SELV
IP20 emc

Applications

The freedom of wireless mesh networks configured by smartphone APP's considerably changes the approach to connected lighting controls. Hytronik has designed such lighting controls using Bluetooth® 4 wireless mesh technology to support the functional demands of most commercial and domestic applications:

■ Office / Commercial Lighting
■ Domestic Homes

HBTD8200D(/F) DALI Digital Wireless Dimmer

Using the DALI protocol in 'broadcast' mode provides support for modern LED lighting fixtures. The built-in DALI power supply can support up to 50 lighting points with flicker-free operation when used with quality DALI LED drivers, such as the Hytronik Premium DALI range.

HBTD8200V(/F) 1-10V Analogue Wireless Dimmer

This version is provided to support the use of 1-10V analogue dimmable lighting fixtures which are still widely used in LED lighting controls today. This model also features a relay capable of switching 400VA and can be used as a simple 'wireless switch' if dimming is not required.

HBTD8200T(/F) 150W Trailing Edge Wireless Dimmer

Designed to suit the needs of most domestic lamps which are designed to be dimmed using traditional trailing edge triac dimmers, this version is suitable for retro-fit or new-build / refurbishment projects.

All models support 2 manual retractive (non-latching) switch inputs to provide manual operation of the lighting. The free to download and use App provides the user with automated control functions as well as the ability to set up the points in logical groups to create scenes.

Features

- 100mA broadcast DALI output for up to 50 LED drivers per node.
- 1-10V output control option - also can be used for on/off relay control
- 150VA trailing edge output version.
- Free smartphone (iOS and Andriod) App for set-up and comissioning:

- 2-input Switch-Dim with synchronization for simple manual over-ride
- Short circuit protection
- Over-load protection
- Permanent settings memory, protected against loss of power
- 5 Year, 50,000hr warranty

CE emc RED Intertek CB IP20

Socket mounting   Flush mounting

DALI / 1-10V Version

Socket mounting   Flush mounting

Trailing Edge Version
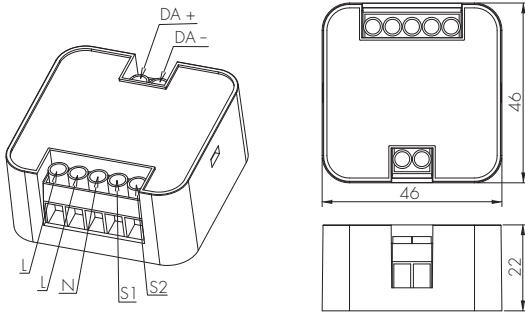
Free smartphone App for set-up and commissioning

HYTRONIK

Download on the APP Store

Compatible with iOS 8.0 or later
iOS

Android version coming soon…
android

DALI Version

Socket mounting HBTD8200D

DA +
DA −

L N S1 S2

46
46
22

Flush mounting HBTD8200D/F

DA +
DA −

HBTD8200D/F

L N S1 S2

22
58
52.1
46
3.1
46

1-10V Version

Socket mounting HBTD8200V

0/1~10V −
0/1~10V +

L N S1 S2

46
46
22
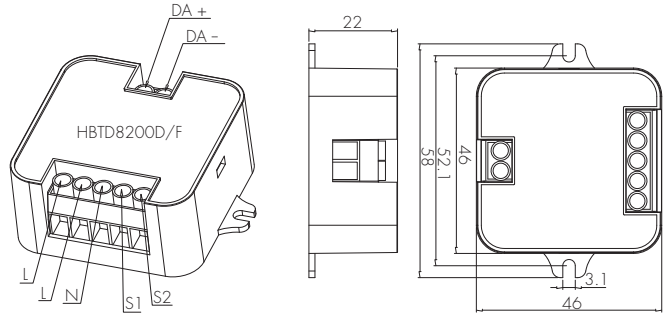
Flush mounting HBTD8200V/F

0/1~10V −
0/1~10V +

HBTD8200V /F

L N S1 S2

22
58
52.1
46
3.1
46
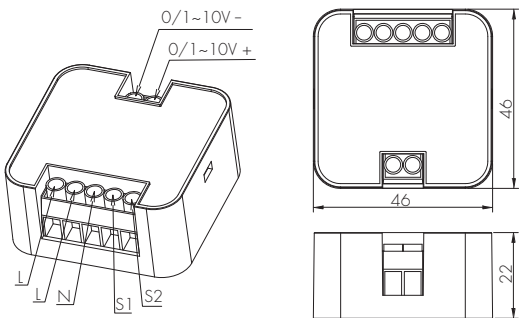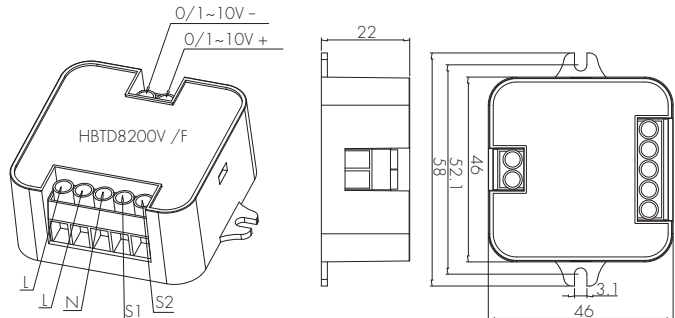
Trailing Edge Version

Socket mounting HBTD8200T

L N S1 S2

46
46
22

Flush mounting HBTD8200T/F
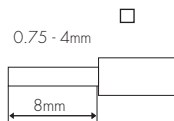
HBTD8200T /F

L N S1 S2

22
58
52.1
46
3.1
46
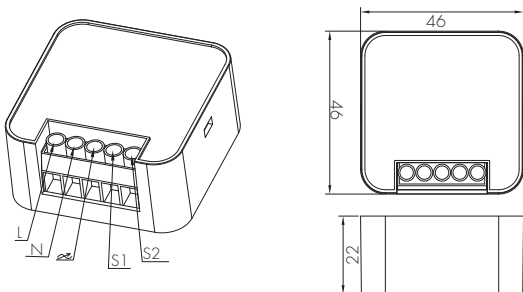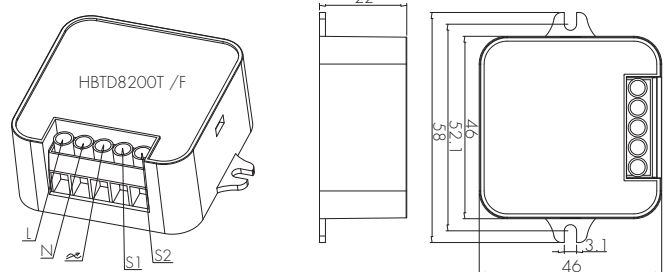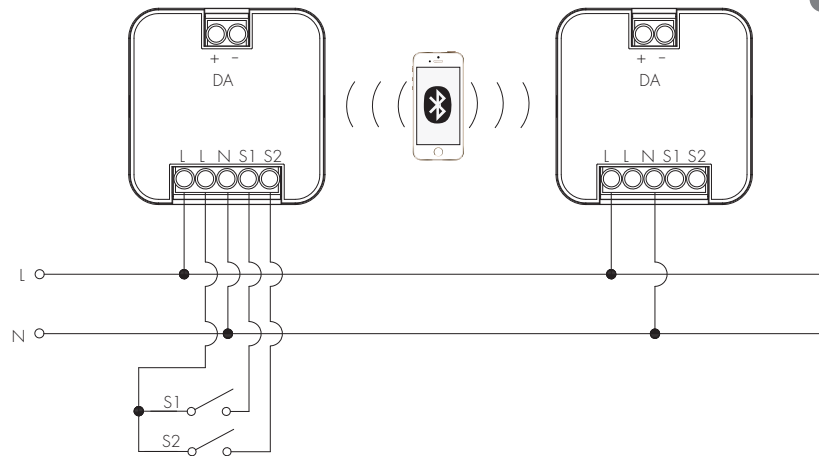

Wire Preparation

Rising clamp terminal.

0.75 - 4mm

8mm

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

DALI Version

1-10V Version
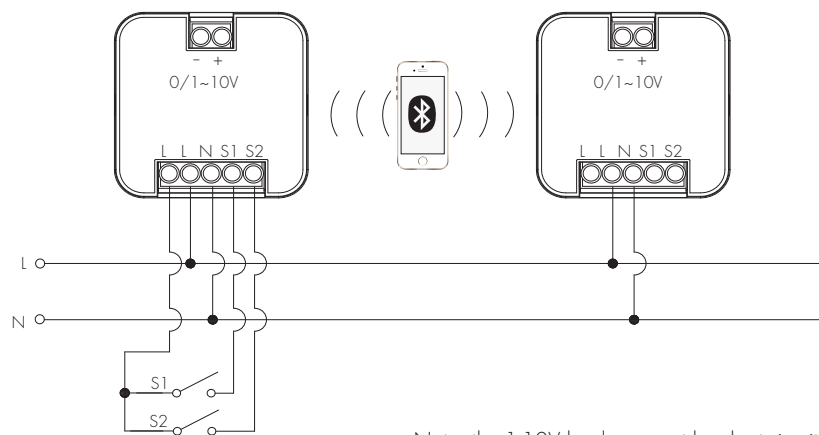
Note: the 1-10V leads can not be short-circuit.

Trailing Edge Version
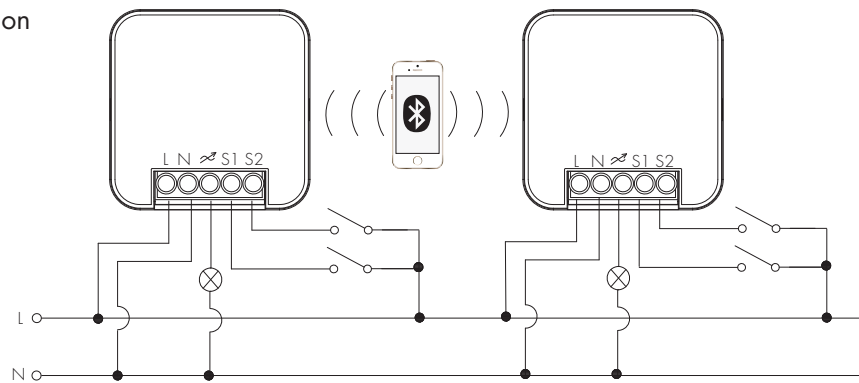
Technical Data For Transceiver Node (Common Data)

Bluetooth Transceiver	
Operation frequency	2.4 GHz - 2.483 GHz
Transmission power	7.5 dBm
Range (Typical indoor)	15~30m
Protocol	❋ Bluetooth® 4 Wireless Mesh

Safety and EMC (Common Data)	
EMC standard (EMC)	EN55015, EN61547 EN62479, EN61000
Safety standard (LVD)	IEC/EN 60669, AS/NZS 60669
Radio Equipment (RED)	EN300 328, EN301 489, EN62479
Certification	Semko, CB, CE , EMC, RED, RCM

Input/Output Characteristics		Environment	
Mains voltage	220~240VAC 50/60Hz	Operation temperature	Ta: -20°C ~ +50°C
Stand-by power	<0.5W	Case temperature (Max.)	Tc: +80°C
Load ratings:		Storage temperature	-20°C ~ 50°C
HBTD8200V (/F)	400VA (capacitive), 800W (resistive)	Relative humidity	20 ~ 90%
HBTD8200D (/F)	100mA, 16VDC (max. 50 devices)	IP rating	IP20
HBTD8200T (/F)	1-150VA (Capacitive) / 1-150W (Resistive)	Insulation	Class II

Typical Range and Placement Guide

Network Considerations:

The recommended maximum distance between dimmers is 15m - 30m. Please be aware that building materials such as concrete and sheet steel will effect the range achievable when installed.

Other forms of interference which may affect the range include WiFi routers, microwave ovens and other such sources which emit strong signals should be taken into consideration when installing.

The smart device with the App installed will have a typical range of 10m, but varies from device to device. During commissioning, the installer will need to be in range of the devices when searching for devices to add to the network.

Once the devices have been added to the network via the App, the devices will start communicating within the wireless mesh. This means that once the network is complete, all devices are accessible from the smart device when in a 10m range of a single point.

Hardware Features

Manual Override (S1 & S2 terminals)

The Switch-Dim terminal reserves the access of manual override function for the end-user to switch on/off, or adjust the light level by push-switch. Furthermore, by using the "push-sync" option in the App, entire groups of fixtures may be wirelessly controlled by a single switch. Please refer to the App user guide for further information.

*   Short Push (<1s): permanent on/off function; can also be configured to recall scene selection.
*   Long Push (>1s): Brightness level adjustment or color tuning (adjust the brightness only for trailing edge version).

Notes:

1) Both the adjustment on App and push switch can overwrite each other, the last adjustment remains in memory.

2) The switch functions are configured in the App.

3) The S1 & S2 terminals may be left unconnected if no manual control is required.