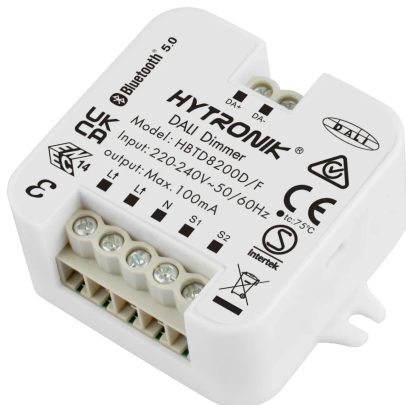


HBTD8200D/F

DALI/Bluetooth Converter | With PUSH Interface | Built-in

HYTRONIK[®]
SENSORS & LIGHTING CONTROL



Benefits

- Small: DALI/Bluetooth converter in a tiny module
- Professional: Powered-DALI to control DALI2 drivers
- Flexible: 2 Push inputs for manual control

Applications

- Built-in luminaries
- Bluetooth receiver node
- Offices, Classrooms, Industry and Healthcare Spaces

Check Out the Complete System Solution on the Website:
<https://www.hytronik.com/product/HBTD8200D-F>



CB

CE

emc



RED

UK
CA

Product Description

HBTD8200D/F is a Bluetooth Receiver Node with the DALI I broadcast output. It can be used alongside our Bluetooth motion sensor range as Bluetooth receiver nodes. It can also be used solely as Bluetooth control unit for each luminaire. Whether for home use, commercial or industrial applications. Simple device setup and commissioning can be done via Koolmesh app.

Functions and Features

See additional details at the end of datasheet



DALI Broadcast
Output



Koolmesh - See
bluetooth control
below



Over load
Protection



Push-Button
Input



Short-circuit
Protection

Specifications

Main Capabilities	
Dimming (Output) Interface	DALI/DALI-2

Electrical Data	
Bluetooth frequency	2.4 GHz - 2.483 GHz
Bluetooth range	10-30m
Bluetooth transmit power	4 dBm
Bluetooth system	Koolmesh
Operating voltage range	220-240 VAC 50/60 Hz
Stand-by power (Psb)	<0.5W
DALI bus maximum rated current (I _n max)	100 mA
DALI bus nominal DC voltage range (U _n)	15 V
DALI bus nominal current (I guaranteed)	80 mA

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Specifications

Technical	
Product weight	50.0 g
Product height	22.0 mm
Product length	58.0 mm
Product width	46.0 mm
Ambient temperature	-20 ~ +45 °C
Storage temperature	-20 ~ +60 °C
Humidity max	20 ~ 90%
Case Temp.max	75.0 °C
IP Rate	IP20

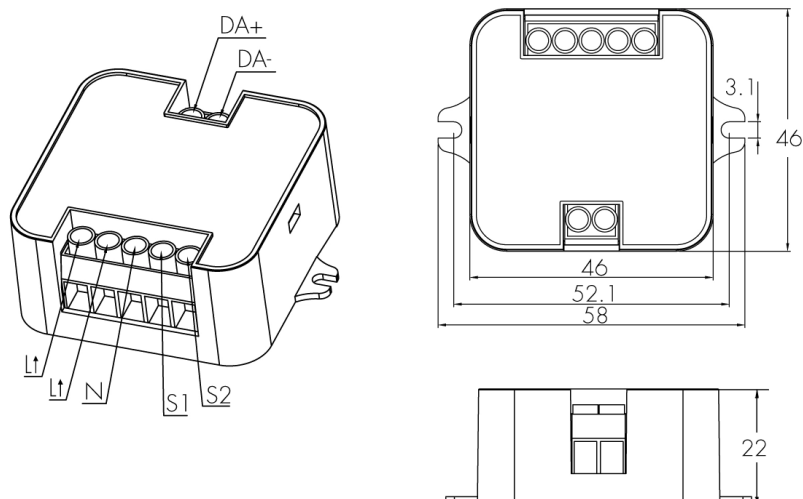
Standard	
EMC	EN 55015, EN 61000, EN 61547, EN 62479
LVD	AS/NZS 61058, IEC/EN 61058
RED	EN 300328, EN 301489-1/-17, EN 62479

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Technical Drawing



Application Example



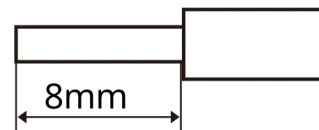
HBTD8200D/F

DALI/Bluetooth Converter | With PUSH Interface | Built-in

Wire Preparation

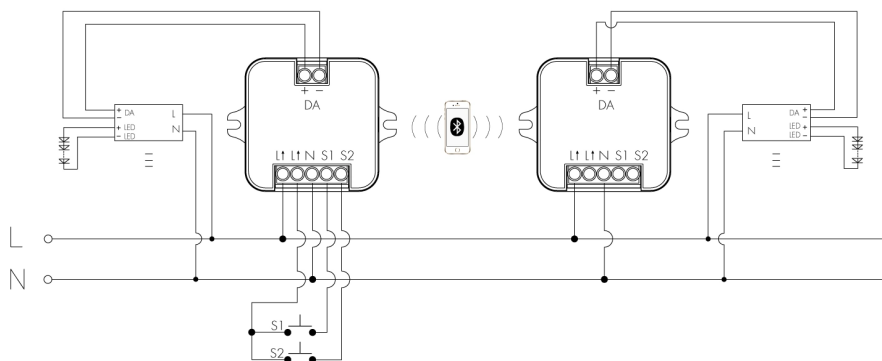


0.2~4mm²



Use a Phillips screwdriver to loosen or secure the cable at the contact screw connections. 1. 200 metres (total) max. for 1mm² CSA (Ta = 50°C) 2. 300 metres (total) max. for 1.5mm² CSA (Ta = 50°C)

Wiring Diagram



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DALI/Bluetooth Converter | With PUSH Interface | Built-in



Commissioning Instructions and Precautions

A. Installation Notes

1. This product should be installed by a qualified electrician.

B. Sensor link

2. Certain scenes which require external photocell can be achieved by using together with Hytronik Bluetooth sensors, such as HBIR29, HCD038/BT + sensor head etc.

Warning: For additional important documents, including installation precautions, product guidelines, and guarantee conditions, please refer to the official downloads.

<https://hytronik.com/service/downloads>

Dimming Interface Operation Notes

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.

Note: Single press, double press, and press-and-hold actions can each be independently assigned to one function via the app. Once configured, each action triggers only its assigned function. Multiple functions cannot be activated by a single press action.

Switch function	Action	Descriptions
Emergency Self-Test Function	Single press (>0.1s) Double press Press and hold (>= 1s)	• Disable • Function test • Duration test • Erminated test
Fire Alarm Function	Refer to http://faq.koolmesh.com/docu/en/	• 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.
Normal PUSH (Retractive Switch)	Single press (> 0.1s) Double press Press and hold (>= 1s)	• ON/OFF • OFF only • Recall this scene • Sensor take over • Not in use
Sensor-Link	/	• Hold time/scene • Stand-by time/scene • Upgrade a normal on/off motion sensor to a Bluetooth-controlled motion sensor

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DALI/Bluetooth Converter | With PUSH Interface | Built-in

Options

Compatible products (for full functionality)



HPAD-TSJASE1

Bluetooth Touch Tablet | Gateway Integrated | Switch
Boxes

www.hytronik.com/product/HPAD-TSJASE1

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Koolmesh - Operating guide

Bluetooth 5.0 SIG Mesh



Smartphone(ios)



Smartphone (Android)



iPad



Web

For additional information, including project and network, device, and scenes, please refer to: <http://faq.koolmesh.com/faq/en/index.html>

Shared Koolmesh App Features

- | | |
|--|---|
|  Alert for excess lux / temperature / humidity via multi-meter HBLM01 |  Koolmesh Pro iPad for on-site configuration |
|  Astro timer (sunrise and sunset) |  Network sharing via QR code or keycode |
|  Bulk commissioning (copy and paste settings) |  Offline commissioning |
|  Compatible with Shelly energy metering |  One-key device replacement |
|  Continuous development in progress... |  Quick setup mode & advanced setup mode |
|  Device firmware update over-the-air (OTA) |  Remote control via Hytronik gateway & touch screen HPAD-TSJASE1 |
|  Device social relations check |  Scenes |
|  Different permission levels via authority management |  Schedule |
|  Floorplan feature to simplify project planning |  Staircase function for quick setup |
|  Grouping luminaires via mesh network |  Test mesh network connection quality |
|  Internet-of-Things (IoT) featured |  Web platform for project deployment & data analysis |

Device-specific Koolmesh App features

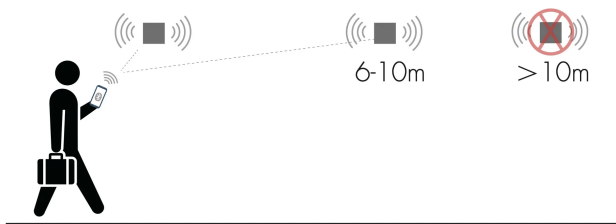
- | | |
|--|---|
|  Compatible with EnOcean kinetic switches |  Push switch configuration |
|--|---|

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Smart Phone to Device Range

1. The smart device with the installed App typically has a range of 10m, which may vary between devices.
2. During the commissioning process, the installer must be within range of the devices while searching for them to add to the network.
3. Once the devices are added to the network via the App, they will begin communicating within the wireless mesh.
4. After the network is complete, all devices can be accessed from the smart device within a 20m range of a single point.



Bluetooth Network Components



HBGW02

Bluetooth Mesh Gateway | Ethernet or Wi-Fi 2.4GHz | wall/flat surface mounting
www.hytronik.com/product/HBGW02



HBGW02/D

Bluetooth Mesh Gateway | Dual-band Wi-Fi | wall/flat surface mounting
www.hytronik.com/product/HBGW02-D



HBGW03/R

BACnet Gateway | Dual-band Wi-Fi or Ethernet | DIN rail/wall/flat surface mounting
www.hytronik.com/product/HBGW03-R



HBKS01/W

Bluetooth Kinetic Switch | One-gang | Wireless Control
www.hytronik.com/product/HBKS01-W



HBKS01D/W

Bluetooth Kinetic Switch | Single Rocker | White Color
www.hytronik.com/product/HBKS01D-W



HBKS02/W

Bluetooth Kinetic Switch | Two-gang | White Color
www.hytronik.com/product/HBKS02-W



HBKS02D/W

Bluetooth Kinetic Switch | Double Rocker | White Color
www.hytronik.com/product/HBKS02D-W



HBKS03/W

Bluetooth Kinetic Switch | Three-gang | White Color
www.hytronik.com/product/HBKS03-W



HBLM01

Multi-meter | Bluetooth & NFC | Lux Measurements
www.hytronik.com/product/HBLM01



HPAD-TSJASE1

Bluetooth Touch Tablet | Gateway Integrated | Switch Boxes
www.hytronik.com/product/HPAD-TSJASE1

HBTD8200D/F

DALI/Bluetooth Converter | With PUSH Interface | Built-in

Functions and Features



DALI Broadcast Output

This product supports DALI broadcast output, allowing control commands to be sent simultaneously to all devices on the DALI bus without individual addressing.

This enables simple group control, synchronized operation, and fast commissioning within a DALI lighting system.



Over load Protection

This product incorporates overload protection that limits or disables the output when the connected load exceeds the rated capacity. This protection helps prevent overheating, excessive component stress and unstable operation, ensuring safe and reliable system performance.



Push Button Input

This product integrates push-button (momentary switch) inputs, allowing external potential-free switches to trigger basic lighting control functions. Each input can be configured for actions such as on/off switching, dimming or scene recall, providing flexible manual control and user interaction within the lighting system. The push-button inputs operate independently of the sensor's automatic functions, enabling seamless coexistence of manual and sensor-based lighting control.



Short-Circuit Protection

This product incorporates short-circuit protection that automatically disables the output in the event of a short circuit. Normal operation is restored automatically once the fault condition is removed, protecting the device and connected components from damage.

Check out for further explanation of features

<https://hytronik.com/solutions/lighting-control-features>