Installation and Instruction Manual

LENA LIGHTING | Clue

Bluetooth Receiver Node - DALI Version   WSE0011 | 624667 (**HBTD8200D/F**)

1. Technical Specifications

Product type	Bluetooth DALI Digitial Receiver Node (Flush mount)
Mains voltage	220~240VAC 50/60Hz
Rated load	Max.100mA, 50 devices
Stand-by power	<0.5W
Operation frequency	2.4 GHz - 2.483 GHz
Transmission power	4 dBm
Range (Typical)	10 ~ 30m
Protocol	Bluetooth 5.0 SIG Mesh
Operation temperature	Ta: -20°C ~ +45°C
Case temperature (Max.)	Tc: +75°C
Storage temperature	-20°C ~ +60°C
Max. relative humidity	20 ~ 90%
IP rating	IP20
Impulse withstand voltage	2.5KV
Duty type	S1
Insulation material	PTI material group IIIa
Glow wire	level 3, 850°C
Protection	Built-in protection provide
Insulation	Class II
EMC standard (EMC)	EN55015, EN61547, EN61000-3-2, EN61000-3-3
Safety standard (LVD)	IEC 61058-1, EN 61058-1, IEC 61058-1-2 EN 61058-1-2, AS/NZS 61058.1
Radio Equipment (RED)	EN300 328, EN301489-1, EN301489-17, EN62479

2. Download the App

Free App for set-up and commissioning

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Smartphone app for both **iOS & Android** platform

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

3. Dimming Interface Operation Notes
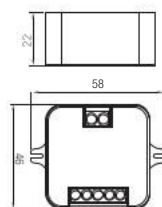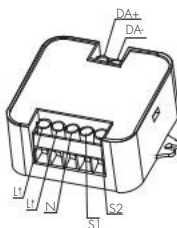
Switch-Dim

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.

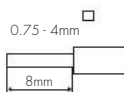| Switch Function	Action	Descriptions
Push switch	Short press (<1 second) * Short press has to be longer than 0.1s, or it will be invalid.	- Turn on/off - Recall a scene - Turn on only - Exit manual mode - Turn off only - Do nothing
	Double push	- Turn on only - Exit manual mode - Turn off only - Do nothing - Recall a scene
	Long press (≥1 second)	- Dimming - Colour tuning - Do nothing
Simulate sensor	/	- Upgrade a normal on/off motion sensor to a Bluetooth controlled motion sensor

4. Installation

⚠ Warnings:
1. Installation must be carried out by a qualified engineer in accordance with local regulations.
2. Disconnect power supply before installing.
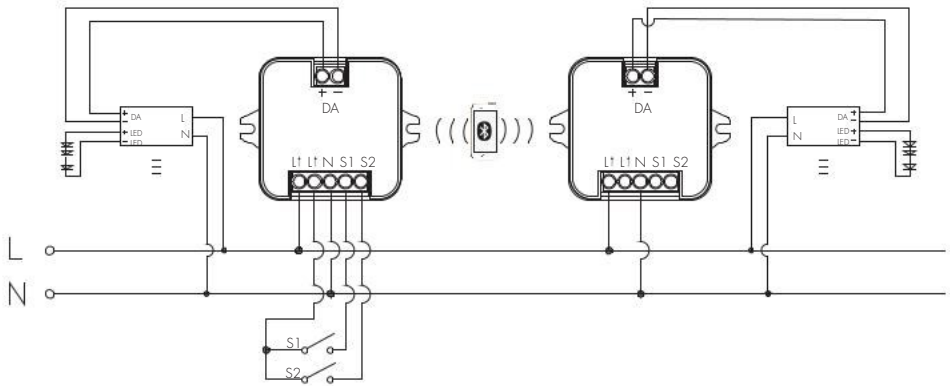3. Ensure environmental conditions are suitable for electronic equipment.

Wire Preparation

Rising clamp terminal.

0.75 - 4mm

8mm

1. 200 metres (total) max. for 1mm² CSA (Ta = 50 C)
2. 300 metres (total) max. for 1.5mm² CSA (Ta = 50 C)

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Wiring Diagram

5. Additional Information / Documents

1.To learn more about detailed product features/functions, please refer to www.hytronik.com/download ->knowledge ->Introduction of App Scenes and Product Functions

2. Regarding precautions for Bluetooth product installation and operation, please kindly refer to www.hytronik.com/download ->knowledge ->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 www.hytronik.com/products/bluetooth technology ->Bluetooth Sensor ->Receiver Nodes

4. Regarding Hytronik standard guarantee policy, please refer to www.hytronik.com/download ->knowledge ->Hytronik Standard Guarantee Policy

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HBTD8200D/F-20200403-A2

1. Technical Specifications

Product type	**Bluetooth** Switch (Flush mount)
Mains voltage	220~240VAC 50Hz
Rated load	400VA(Capacitive); 800W(Resistive)
Stand-by power	<0.5W
Operation frequency	2.4 GHz - 2.483 GHz
Transmission power	4 dBm
Range (Typical)	10 ~ 30m
Protocol	**Bluetooth** 5.0 SIG Mesh
Operation temperature	Ta: -20°C ~ +45°C
Case temperature (Max.)	Tc: +75°C
Storage temperature	-20°C ~ +60°C
Max. relative humidity	20 ~ 90%
IP rating	IP20
Impulse withstand voltage	2.5KV
Duty type	S1
Insulation material	PTI material group IIIa
Glow wire	level 3, 850°C
Protection	Built-in protection provide
Type of switch	Single load(single-ploe disconnection)
Insulation	Class II Pollution degree 2
EMC standard (EMC)	EN55015, EN61547, EN61000-3-2, EN61000-3-3
Safety standard (LVD)	IEC 61058-1, EN 61058-1, IEC 61058-1-2 EN 61058-1-2, AS/NZS 61058.1
Radio Equipment (RED)	EN300 328, EN301489-1, EN301489-17, EN62479

2. Download the App

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Smartphone app for both **iOS & Android** platform

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

3. Dimming Interface Operation Notes
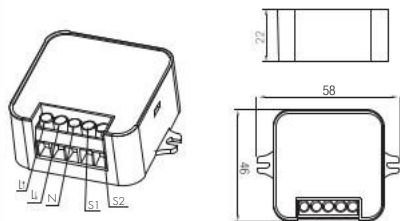
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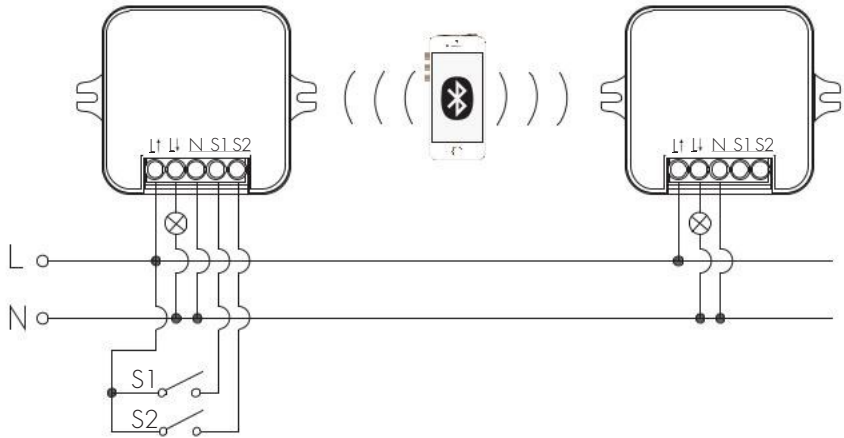| Switch Function	Action	Descriptions
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Wire Preparation

Rising clamp terminal.

0.75 - 4mm

8mm

Wiring Diagram

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Product Description

HTG01/F & HTG02/F are Bluetooth modules with a real-time chip built in that can keep real time running for up to 12 weeks during power loss, which is very convenient for Bluetooth system/network where there is constant need for power on/off. When a product group mesh network is created, the entire network takes HTG01/F or HTG02/F as the authoritative time. External Bluetooth antenna can be connected for a longer Bluetooth broadcast distance.

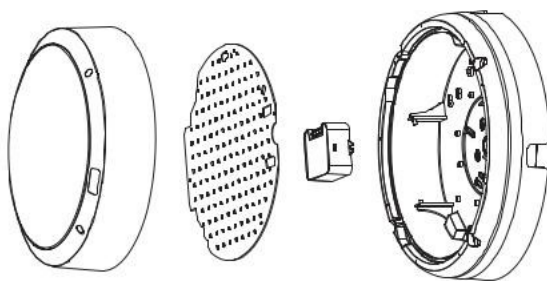HTG01/F   HTG02/F

Funkcje

- Compatible with EnOcean BLE switches Grouping luminaires via mesh network
- Device firmware update over-the-air (OTA)
- Continuous development in progress…

Hardware Features

- Two optional reinforced antenna available
- Bluetooth range extender
- Ability to keep real-time for up to 12 weeks during power loss
- Compact design with two screw holes to be built inside luminaires
- Short-circuit protection
- 5-year warranty

Typical Switch Box Mounting

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

Optional accessory: Reinforced Bluetooth antenna

HTG01/F

※Standard version
※Keep up to 12 weeks time during power loss
※Repeater / Bluetooth range extender
※Up to 30m transmission distance
※2 screw holes for mounting

HTG02/F

※Reinforced version
※Keep up to 12 weeks time during power loss
※Repeater / Bluetooth range extender
※2 screw holes for mounting

+

Antenna option 1
※Up to 50m transmission distance

Antenna option 2
※Up to 50m transmission distance

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	120~277VAC 50/60Hz

Safety & EMC	
EMC standard (EMC)	EN 55015, EN61547, EN 61000-3-2/3-3
Safety standard (LVD)	EN61347-1, EN 61347-2-11
RED	EN 300328, EN 301489-1/-17

Environment	
Operation temperature	Ta: -20°C ~ +60°C
Storage temperature	-40°C ~ 70°C
Relative humidity	10 ~ 90%
IP rating	IP20
Insulation	Class II

Mechanical Structure & Dimensions

HTG01/F
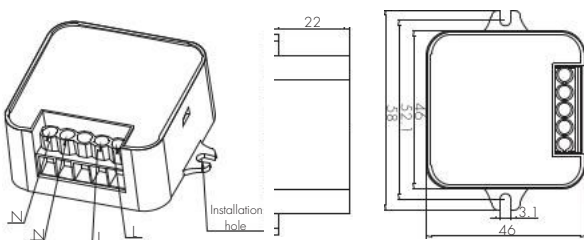
HTG02/F

Wire Preparation

0.75 - 4mm

8mm
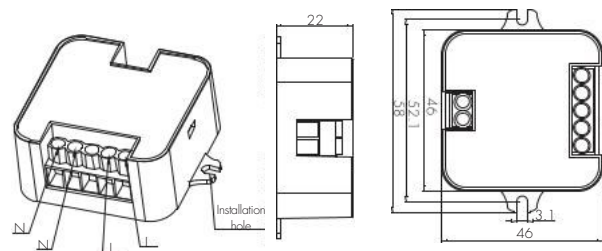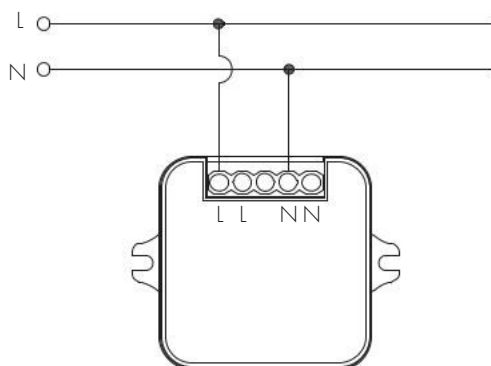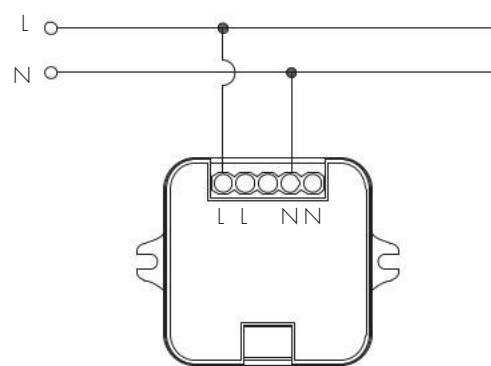
To make or release the wire from the terminal, use a screwdriver to push down the button.

Wiring Diagram

HTG01

HTG02

## Optional accessory: Reinforced Bluetooth antenna

For some special Applications, customers may need a larger Bluetooth transmission for both smartphone to device and device to device. Thanks to the reinforced Bluetooth antenna (optional 1 or optional 2 to choose from), with it being added to the HTG01/F or HTG02/F, the transmission distance (smartphone to device) enlarges to 20m, the distance of device to device is around 50m.

Option 1
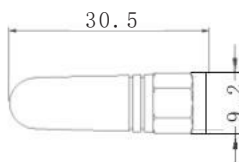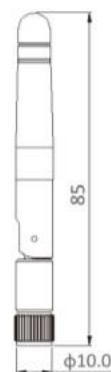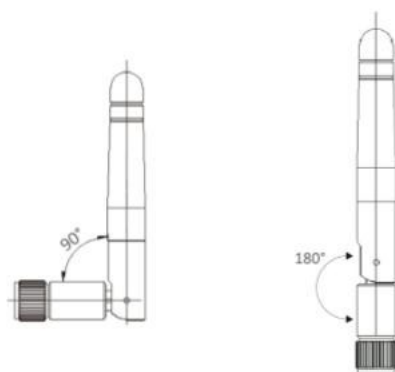
30.5

9.2

Installation hole
Ø11

Option 2

90°

180°

85

Ø11
Installation hole

φ10.0

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