

1. Technical Specifications

Product type	Built-in DALI-to-Bluetooth Converter / Translator Module
Mains voltage	220-240VAC 50/60Hz
Rated load	Max.100mA, 50 devices
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 ~ +50°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

Bluetooth 5.0 SIG mesh



for iOS

for Android

Smartphone app for both iOS & Android platform



for iPad

Koolmesh Pro app for iPad



for Web

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

3. Dimming Interface Operation Notes

Switch-Dim

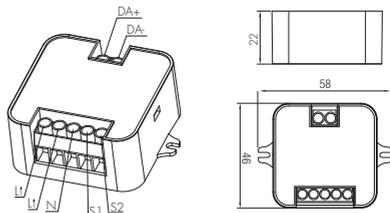
The provided Switch-Dim interface allows for a simple dimming method using commercially available non-latching (momentary) wall switches. Detailed Push switch configurations can be set on Koolmesh app.

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
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 (Annually) - Invalid

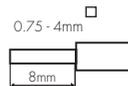
4. Installation

⚠ 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.



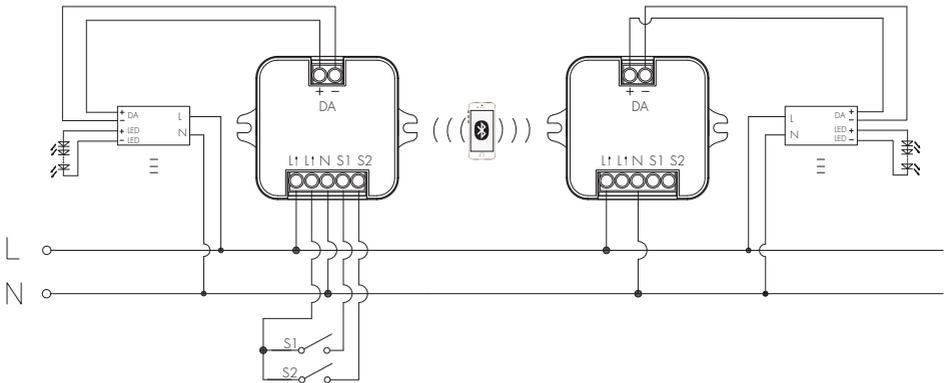
Wire Preparation



Rising clamp terminal.

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



5. Functions

Point to Point Control: 1pc HBEM8200D/F converter for 1pc 3rd party DALI/DALI2 emergency driver. This module converts a standard DALI/DALI2 emergency driver output to Bluetooth output, so that user can view, edit and manage the emergency system through high-end Koolmesh platform. User can then enjoy all the powerful and convenient features such as scheduling a monthly self test or annually self test in the app, checking the DALI/DALI2 emergency drivers' status, including automatic email notification upon detecting fault, automatic monthly/yearly (functional/duration test) emergency report generation etc. All the settings and parameters can be set in both Koolmesh app and Koolmesh IOT platform.

Remote Control and Monitoring: with Bluetooth gateway HBGW01, users can remotely control and monitor emergency system via Koolmesh mobile/tablet app & web app platform.

* HBEM8200D/F & 3rd Party standard DALI / DALI2 emergency driver does not need to connect to central DALI PSU. HBEM8200D/F provides power supply to the 3rd party standard DALI/DALI2 emergency driver.

* Users can use Koolmesh app to control their standard DALI/DALI2 emergency driver and set the parameter configuration in the app such as monthly test, annually test. In Koolmesh app, there are four modes which allow users to switch the status of the emergency device and carry out self test for all the emergency devices on the network level.

More details, please refer to www.koolmesh.com/app-highlights -> Emergency User Manual

6. 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