

Street controller with e time keeper Bluetooth 5.0 SIG Mesh



LENA LIGHTING

Clue

624551 – Controller BT TK HYT NEMA DALI Clue City IoT z HBTD8200D/F



Technical Specifications

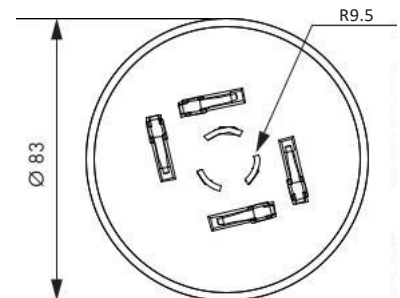
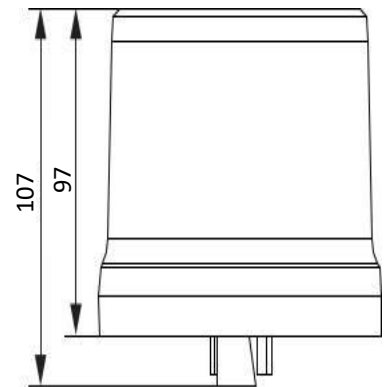
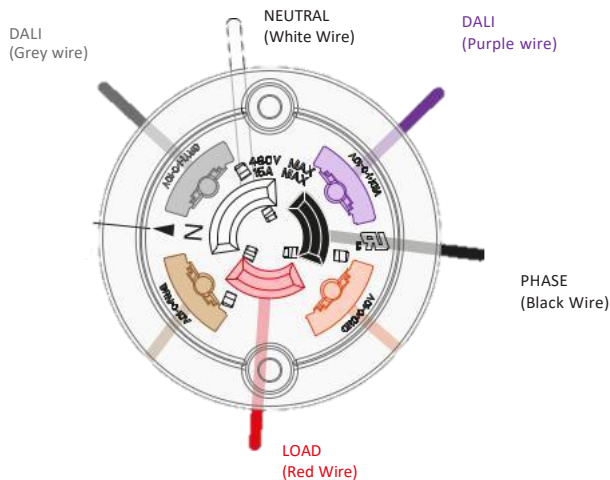
Product type	Bluetooth controller in a NEMA enclosure
Line voltage	220~240VAC 50/60Hz
Rated load	Maks. 100 mA, 50 urzqdzei
Standby power	<0.5W
Operating frequency	2,4 GHz - 2,483 GHz
Transmission power	4 dBm
Distance between modules	max. 50m
Protocol	Bluetooth 5.0 SIG Mesh
Operating Temperature	Ta: -20°C ~ +45°C
Enclosure Temperature (Max)	Tc: +75°C
Storage Temperature	-20°C ~ +60°C
Maximum Relative Humidity	20 ~ 90%
Degree of mechanical protection	IP66 (IEC 60529)
Max instantaneous voltage	2,5KV
Type of work	S1
Insulation Material	Material group PTI IIIa
Glow Wire	Level 3, 850°C
CI protection	IK09 (IEC 62262)
Insulation	Class II
Electromagnetic Compatibility (EMC) Standard	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



DALI Version + Time Keeper HTG02


















NEMA enclosure electrical connection diagram:



## Product Description

The HBTD8200D/F series of controllers is designed as a Bluetooth receiver designed to be built into the luminaire. They can be used alongside our range of Bluetooth motion detectors, or solely as a Bluetooth control unit for each luminaire. Whether for domestic, commercial or industrial use, the HBTD8200/F series opens up full control functionality. A version with an external antenna is available for installation in steel housings. Simple setup and commissioning of the device can be done using the Lena Lighting Clue app.

### App Features










-  Floor plan feature to simplify project planning
-  Grouping luminaires using mesh
-  Scene
-  Push-button switch configuration
-  Schedule scenes based on time and date
-  Astro clock (sunrise and sunset)
-  Over-the-air device firmware update (OTA)
-  Power-on state (power-loss protection memory)
-  Offline boot
-  Different permission levels through permission management
-  Share on the network via QR code or key code
-  Remote control with the HBGW01 gateway
-  Interoperability with the Bluetooth product portfolio
-  Compatible with EnOcean BLE switches
-  Continuous development in progress...

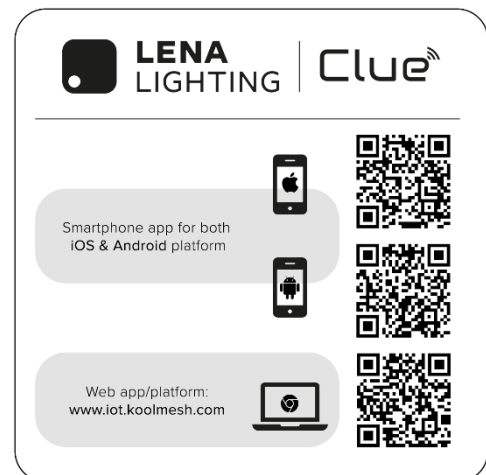
\* Some scenes that require external photocell can be achieved with Bluetooth sensors, such as HBIR29, HCD038/BT+ sensor head, etc.



Fully supports EnOcean self-powered switch module PTM215B (HBES01/W and HBES01/B)

### Hardware features

-  HBTD8200S/F: ON/OFF control with load: 400VA (capacitive) and 800W (resistive)
-  HBTD8200V/F: 1-10V output: 400VA (capacitive) and 800W (resistive) with relay control
-  HBTD8200D/F: 100mA DALI transmission output for up to 50 LED drivers
-  Compact design with two openings for installation inside the luminaires
-  2 push inputs for flexible manual control
-  Zero-crossing detection circuit to reduce inrush current and extend relay life (HBTD8200S/F and HBTD8200V/F)
-  Short-circuit protection
-  Overload protection
-  5 year warranty



## Technical Specifications

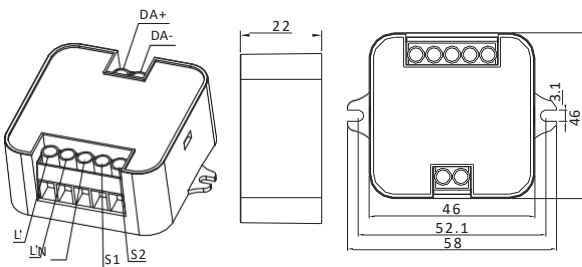
Bluetooth Transceiver	
Operating Frequency	2.4 GHz – 2.483 GHz
Transmission power	4 dBm
Range (typical indoor)	10~30m
Protocol	Bluetooth 5.0 SIG Mesh
Environment	
Operating Temperature	Ta: -20°C ~ +45°C
Enclosure Temperature (Max)	
HBTD8200S/F	Tc: +75°C
HBTD8200V/F	Tc: +75°C
HBTD8200D/F	Tc: +75°C
Storage Temperature	-20°C ~ 60°C
Relative humidity	20 ~ 90%
IP rating	IP20
Insulation	Class II

Input and output characteristics	
Tension:	
HBTD8200S/F	220~240VAC 50Hz
HBTD8200V/F	220~240VAC 50Hz
HBTD8200D/F	220~240VAC 50/60Hz
Standby power consumption	<0.5W
Carrying capacity:	
HBTD8200S/F	400VA(Capacitive), 800W(Resistive)
HBTD8200V/F	400VA(Capacitive), 800W(Resistive)
HBTD8200D/F	100mA,16VDC(max. 50 Devices)

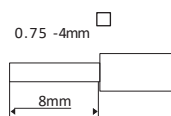
Security and electromagnetic compatibility	
EMC norm (EMC)	EN55015, EN61547, EN62479, EN61000
Safety Standard (LVD)	IEC/EN 61058, AS/NZS 61058
Radio Equipment(RED)	EN300 328, EN301489-1/-17, EN62479
Certification	Semko, CB, CE , EMC, RED, RCM

## Mechanical structure and dimensions

HBTD8200D/F - Version DALI



## Cable preparation

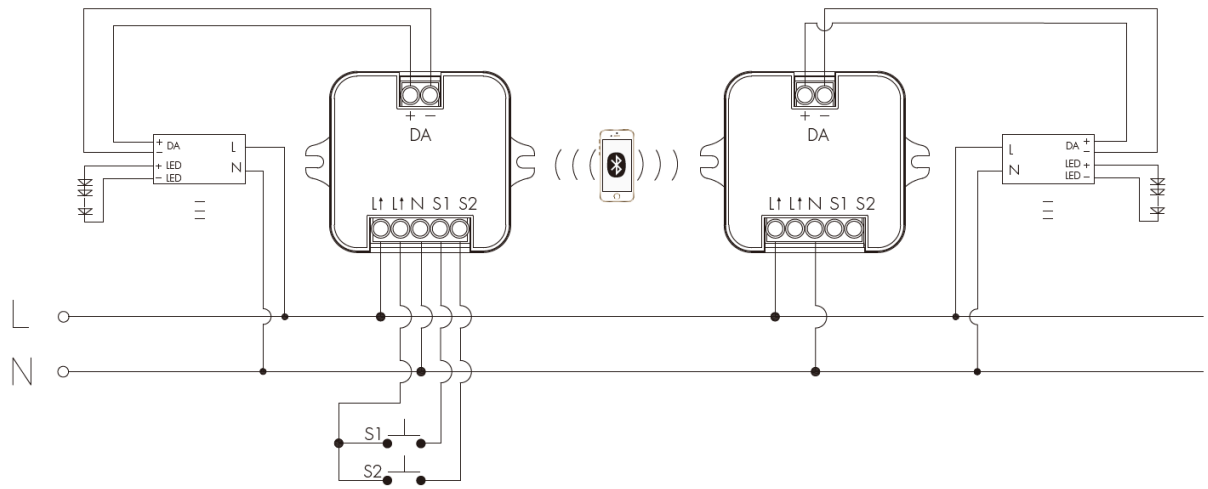


To make or release the wire from the terminal, use a screwdriver to push the button in.

1. 200 meters (total)max. for 1mm<sup>2</sup> CSA (Ta = 50°C)
2. 300 meters (total)max. for 1.5mm<sup>2</sup> CSA (Ta = 50°C)

# Wiring

DALI version  
HBTD8200D/F



## Notes on Dimming Interface Support

### Switch-Dimming

The supplied Switch-Dim interface allows for a simple dimming method with commercially available monostable (momentary) wall switches. Detailed configurations of push-button switches can be set in the Lena Lighting Clue app.

Switch Function	Action	Descriptions
Push-button switch	Short press (<1 second) * Short press must be longer than 0.1s, otherwise it will be invalid.	- On/Off - Only turn on - Only turn off - Recalling the scene - Exit manual mode - Do nothing
	Double press	- Only turn on - Only turn off - Recalling the scene - Exit manual mode - Do nothing
	Long press (≥1 second)	- Dimming - Color tuning - Do nothing
Coupler with sensor	/	- Upgrade the normal on/off motion sensor to a Bluetooth controlled motion sensor
Emergency self-test function	Short press (<1 second) * Short press must be longer than 0.1s, otherwise it will be invalid.	- Start a self-test (monthly) - Stop Self-Test - Start a self-test (annually) - Invalid
	Long press (≥1 second)	- Start a self-test (monthly) - Stop Self-Test - Start a self-test (annually) - Invalid
Fire Alarm (VFC Signal Only)	Zapoznaj się z aplikacją Lena Lighting Clue	-Possibility of connecting a fire alarm system -When the fire alarm system is started, all the fixtures controlled by the push switch will enter the preset scene (usually it is fully on), after the fire alarm system gives an end signal, all the fixtures controlled by this switch will return to normal state.

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