

PHILIPS

Wireless

Wireless Phase-cut
Bridge Box

929001461162



Datasheet

Wireless Wireless Phase-cut Bridge Box

This product is a phase - cut bridge box, can adjust ac output voltage value according to user's control, realize lamp output power adjustment.

By connecting the dimming output interface with the dimming drive power supply, the LED brightness can be controlled in a linear manner, and the luminance and darkness of the lamp can be controlled. The device is used in conjunction with the gateway, and the brightness of the light can be controlled remotely through the APP client. The device is flexible and convenient to install without changing the original wiring pattern of the house. Only power cord, controller and LED light drive connection can be used to control the lighting brightness.

LED intelligent brightness controller is widely used in LED lighting, LED ceiling lamp, LED panel lamp, LED lamp, LED bulb lamp, LED bulb lamp, etc., which has the leading edge and back edge dimming function. This product can be matched with most LED dimming power sources in the market.

Benefits

- TE phase cut, realizing voltage adjustable change
- High power MOSFET control
- Wireless access without control wire relay layout
- Simply connect the traditional dimming products to the control system to achieve mobile APP control
- Intelligent linkage with other ZIGBEE products, which can be linked with other devices in the home and adjust lighting according to the indoor environment

Features

- ZIGBEE compliance agreement (ZHA)
- Suitable for dimming control of LED dimmable driver, fast access to control system
- Suitable for adjustable LED lamps

Application

- Office
- Classroom
- Hotel
- Home

Ordering Information

| Commercial product name | 12NC | Carton Quantity |
|-------------------------------|--------------|-----------------|
| Wireless Phase-cut Bridge Box | 929001461162 | 60 pcs |

Product Data

All specifications are typical and at 25 °C Tcase unless otherwise specified.

Dimensions and weight

| Specification item | Value | Unit | Conditions |
|----------------------|----------------------|------|----------------------|
| Material | ABS + PC (V0 AC3100) | | |
| Color | Darkgray, RAL7016 | | |
| Dimensions L x W x H | 87.5 x 41 x 28 | mm | Tolerance: +/- 0.1mm |
| Weight | 71 | gram | |

Electrical data

| Specification item | Value | Unit | Conditions |
|--------------------------------|------------------|------|--|
| Operation voltage range | 220...240 | Vac | Performance range |
| Rated input current | 1.37 | A | @ Max load |
| Rated input frequency range | 50...60 | Hz | |
| Max output power | 120 | W | @ rated input voltage @ resistive load |
| Input voltage AC range | 202...254 | Vac | Operational range |
| Input frequency AC range | 47.5...63 | Hz | Operational range |
| Standby power | <1.2 | W | @ rated input voltage |
| No load consume power | <1.2 | W | @ rated input voltage |
| Power factor | >0.98 | | @ rated output power @ rated input voltage |
| Total harmonic distortion | <10% | | @ rated output power @ rated input voltage |
| ESD | 4KV @ conductive | | |
| | 8KV @ air | | |
| Mains surge capability (L – N) | 1000 | V | GB19510 |
| Open load protection | No | | |
| Short circuit protection | No | | |
| Over power protection | No | | |

EMC & SAFETY

| Specification item | Value |
|--------------------|---|
| SAFETY | GB19510.1, GB19510.14 |
| EMC | GB17625.1, GB/T 17626.4, GB/T 17626.5, GB/T 17626.7 |
| ESD | GB/T17626.2 (IEC61000-4-2) |

Interface

| Specification item | Value | Unit | Conditions |
|--------------------|---------------|------|------------|
| Dimming range | 0-100 | % | |
| Dimming method | Trailing-Edge | | |

RF data

| Specification item | Value | Unit | Conditions |
|------------------------------|------------------------------------|---------|--|
| RF Frequency | 2.4 ... 2.485 | GHz | |
| Channel | 16 | pcs | |
| Modulation | QPSK (DSSS) | | |
| Transmit Power | 8...10 Typical value : 8.5 | dBm | Conditions: 2.0-3.6V, +25°C |
| Receiving Sensitivity | -92 ... -96 Typical value : -94 | dBm | Nominal for 1% PER |
| Maximum receiver input power | +10 | dBm | For 1% PER measured as sensitivity; supply current at 14.7 mA |
| Physical Protocol | 802.15.4 | | |
| Security | 128 | bit AES | |

Operational temperatures and humidity

| Specification item | Value | Unit | Conditions |
|---------------------|-----------|------|-------------------------|
| Ambient temperature | -20...+50 | °C | |
| Relative humidity | 10...90 | % | |
| Tcase-life | 65 | °C | Measured at Tcase-point |
| Tc-max | 65 | °C | |

Storage temperature and humidity

| Specification item | Value | Unit | Conditions |
|---------------------|-----------|------|------------|
| Ambient temperature | -25...+85 | °C | |
| Relative humidity | 5...95 | % | |

Lifetime

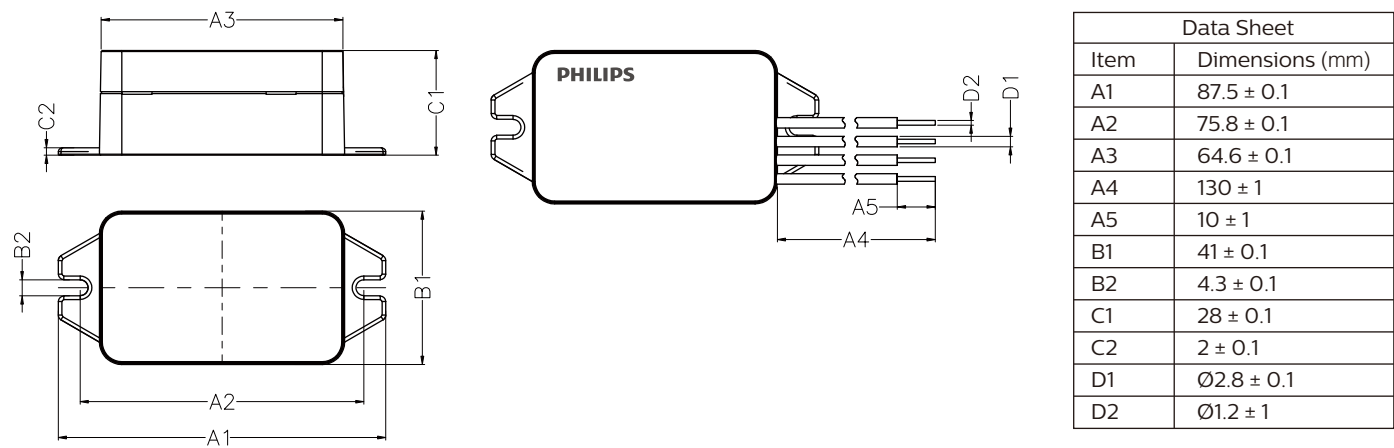
| Specification item | Value | Unit | Conditions |
|------------------------|--------|----------|---|
| Lifetime | 50000 | Hours | Measured temperature at Tcase-point is Tcase-life. Maximum failures=10% |
| Mains switching cycles | 100000 | Switches | |

Certificates and standards

| Specification item | Value | Unit | Conditions |
|-----------------------------------|--------|------|------------|
| Approval marks | CE | | |
| RoHS | RoHS | | |
| REACH | REACH | | |
| ZIGBEE | ZIGBEE | | |
| Audible noise | < 20 | dB | |
| Ingress Protection classification | IP20 | | |

Wireless Phase-cut Bridge Box

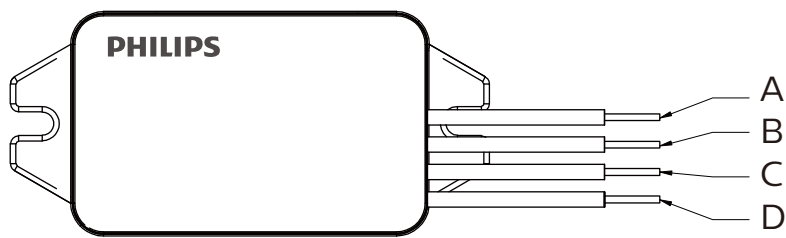
Dimensions (mm)



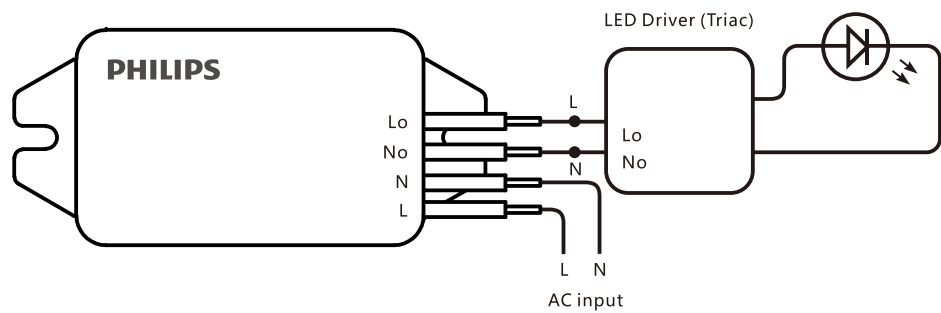
Wiring & Connections

- 1. Disconnect the mains wire
- 2. Use screws to fix the product through the u-shaped groove on both sides
- 3. Connect input L/N of the product with mains
- 4. Connect the output L/N of the product with the L/N of LED dimmable driver

| Pin Definition | | |
|---------------------|----------------|--------|
| Specification item | Definition | Remark |
| A: Lo / Grey wired | Live output | |
| B: No / White wired | Neutral output | |
| C: N / Blue wired | Neutral input | |
| D: L / Brown wired | Live input | |



Example connections





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Data subject to change