

# PHILIPS

WiZ  
PRO

## Wireless

Wireless DW  
Bridge Box



## Datasheet

### WiZ Pro DW Bridge Box B 12-24V

929002686103

#### Enabling connected lighting system for welcoming spaces

Philips WiZ Pro DW bridge box can work with constant voltage LED transformer to enable dimming control features. It enables simple, cost effective wireless lighting system for energy saving and comfort. Advanced design of the bridge box helps to build a reliable and standardized connected lighting system with different functionalities from simple wireless dimming to cloud based operations.

#### Benefits

- Easy wireless dimming and scheduling for energy saving and convenience
- Connecting to Wi-Fi for cloud-based control and remote access. No gateway needed
- Future-proof flexibility, support OTA (Over-The-Air) firmware update
- Large array of integrations to work with popular home assistant systems
- WiZ Click feature enables easy installation
- UL certified

#### Application

- |               |                  |
|---------------|------------------|
| • Residential | • Hospitality    |
| • Restaurant  | • Retail         |
| • School      | • Leisure places |

#### Features

- PWM dimming method with 1 channel outputs
- Suitable for built-in usage
- Energy metering feature with 10% accuracy
- Max 90W output load
- 50,000 hours lifetime
- Wi-Fi + Bluetooth dual protocol module which enable local Bluetooth messages for installation and connectivity to WiZ cloud over Wi-Fi network
- Include access to the WiZ Pro software suite:
  - WiZ Pro Setup app for installers to conduct effortless commissioning
  - WiZ app for end users to control and automate with ease
  - WiZ Pro Dashboard for building managers to perform advanced setting, get actionable usage insights for preventive maintenance and energy optimization

Software available at :

<https://www.wizconnected.com/en/pro/getstarted>

## Logistical data

| Specification item | value                          |
|--------------------|--------------------------------|
| Product name       | WiZ Pro DW Bridge Box B 12-24V |
| 12NC               | 929002686103                   |
| Pieces per box     | 40 pcs                         |

## Product Data

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

### Electrical data

| Specification item   | Value                | Unit | Conditions                                      |
|----------------------|----------------------|------|-------------------------------------------------|
| Rated input voltage  | 12...24              | Vdc  | Performance range                               |
| Rated input current  | 7.5                  | A    | @ Max output power                              |
| Max input power      | 180                  | W    | @ Max output power<br>@ Max Rated input voltage |
| Rated output current | 7.5                  | A    |                                                 |
| Standby power        | 0.50                 | W    | @ Rated input voltage                           |
| ESD                  | 4KV @ HBM, 8KV @ air |      |                                                 |

### Dimming Interface

| Specification item | Value     | Unit | Conditions |
|--------------------|-----------|------|------------|
| Dimming method     | PWM, 2KHz |      |            |
| Dimming range      | 5-100     | %    |            |

### RF interface

| Specification item       | Value       | Unit | Conditions           |
|--------------------------|-------------|------|----------------------|
| Communication method     | Wi-Fi + BLE |      |                      |
| Wi-Fi Frequency          | 2400-2483.5 | MHz  | IEEE Std 802.11 b/g. |
| Wi-Fi Transmission power | 20          | dbm  | Maximum              |
| BLE Frequency            | 2400-2483.5 | MHz  |                      |
| BLE Transmission power   | 3           | dbm  | Maxmium              |
| Wi-Fi channel            | 1...11      |      |                      |

### Indicator

| Specification item | Value                                                         |
|--------------------|---------------------------------------------------------------|
| LED indicator      | Blue Color, indicating the paring status and other procedures |
| Push button        | Tact switch, for pairing and factory reset                    |

Notes:

- 1) Press for under <2s and release : product does a soft reboot, LED status blink 1 time
- 2) Press for 2s ~ 10s and release : product goes into forced pairing mode, outputs dimming variations, LED status pulsing
- 3) Press for >10s and release : reset to factory settings (forgets favorites and Home ID) and reboots, LED status blinks 10 times after reset is done

### Operational temperature and humidity

| Specification item  | Value     | Unit | Conditions |
|---------------------|-----------|------|------------|
| Ambient temperature | -20...+50 | °C   |            |
| Relative humidity   | 10...90   | %    |            |
| Tcase_life          | 70        | °C   |            |
| Tcase_max           | 70        | °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           | 50,000  | Hours  | @ Tcase_life. Maximum failures=10% |
| Switch cycles      | 100,000 | Cycles |                                    |

Certificates and standards

| Specification item | Value                                 |
|--------------------|---------------------------------------|
| Approval marks     | UL, FCC, WFA, BQB, build-installation |
| Environment        | RoHS                                  |
| Connection         | Wi-Fi IEEE802.11 b/g, BLE 4.2         |
| Audible noise      | < 24 dB @5cm                          |
| Ingress Protection | IP20                                  |

Energy Metering

| Specification item       | Value | Unit | Conditions   |
|--------------------------|-------|------|--------------|
| Energy Metering accuracy | <10   | %    | @ Full power |

Notes:

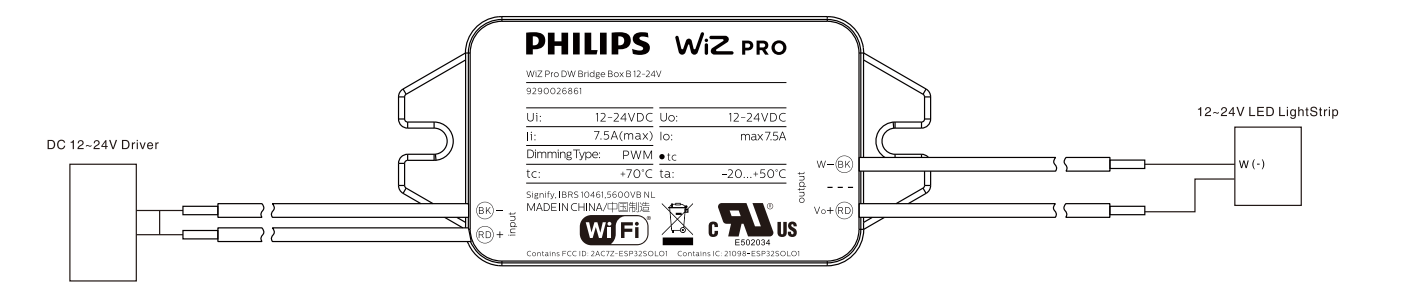
- 1) Energy metering is for reference use only. It is not intended to be used as a measurement instrument for any commercial purpose.
- 2) Energy metering is NOT referable when input current is less than 0.5A.

Wiring & Connections

| Specification item            | Value | Unit            | Conditions                                                                |
|-------------------------------|-------|-----------------|---------------------------------------------------------------------------|
| Input Wire Type               | 1.5   | mm <sup>2</sup> | Strand wire; Red for +, Black for -;<br>Tolerance: +/- 0.1mm <sup>2</sup> |
| Output Wire Type for negative | 1.5   | mm <sup>2</sup> | Strand wire, Black; Tolerance: +/- 0.1mm <sup>2</sup>                     |
| Output Wire Type for Positive | 1.5   | mm <sup>2</sup> | Strand wire, Red; Tolerance: +/- 0.1mm <sup>2</sup>                       |
| Wire Length                   | 130   | mm              | Tolerance: +/- 5mm                                                        |
| Wire Strip Length             | 10    | mm              | Tolerance: +/- 5mm                                                        |



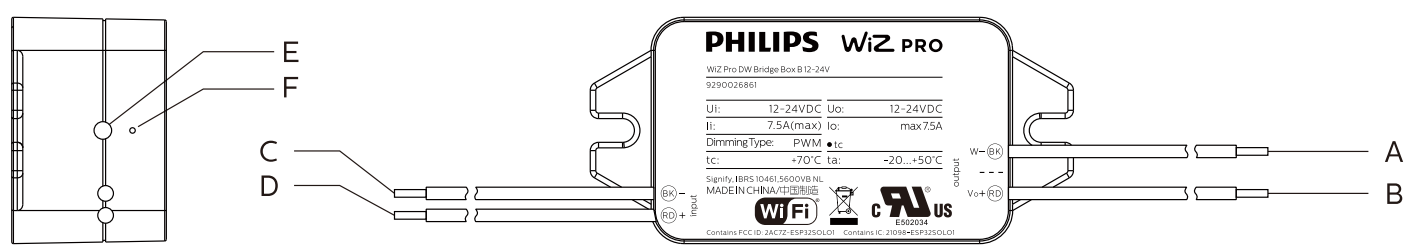
Example of connection:



- 1. Disconnect the power supply lines.
- 2. Use accessory screws to fix the product through the u-shaped groove on both sides.
- 3. Following instructions of silk print on the housing of bridge, then plug the output wires into LED light strip input connectors.
- 4. Plug the input positive and negative wire of the bridge into UL driver output connectors.
- 5. Compatible with Class 2 drivers. When Class 2 drivers are used, output current and power is limited by the class 2 driver.

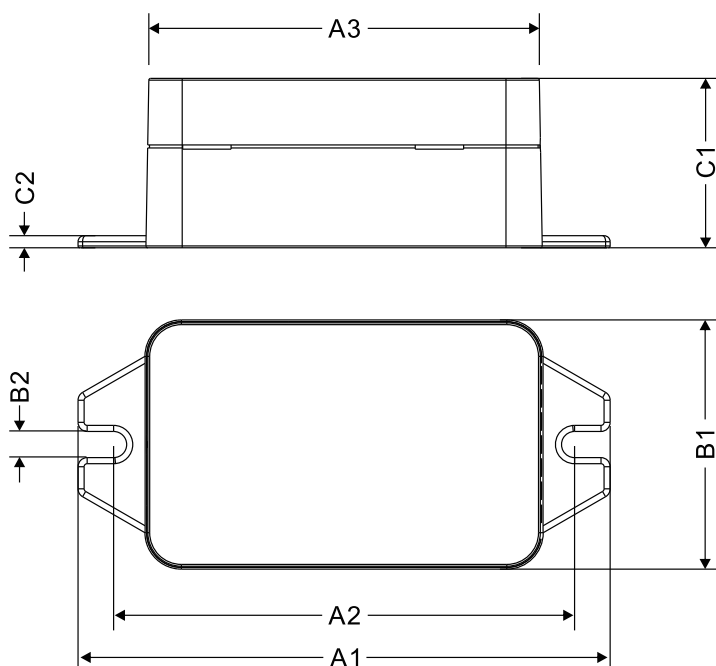
Wire definition:

|   | Specification item | Definition                     | Remark |
|---|--------------------|--------------------------------|--------|
| A | W (-) - Black      | Output: W LED strip            |        |
| B | Vo (+) - Red       | Output: LED strip V+           |        |
| C | V (-) - Black      | DC power supply negative input |        |
| D | V (+) - Red        | DC power supply positive input |        |
| E | Push button        | Reset button                   |        |
| F | LED light          | LED light                      |        |

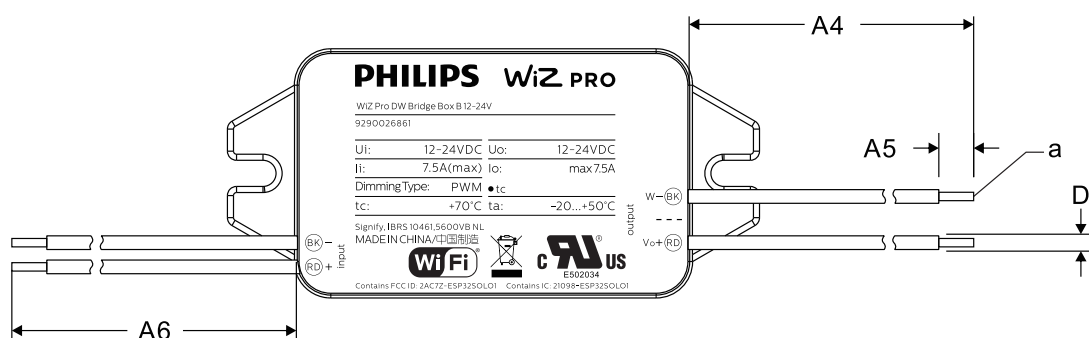


Dimensions and weight

| Specification item   | Value          | Unit | Conditions           |
|----------------------|----------------|------|----------------------|
| Dimensions L x W x H | 88 x 41.2 x 28 | mm   | Tolerance: +/- 0.1mm |
| Color                | White          |      |                      |
| Weight               | 53             | gram |                      |



| Data sheet             |                          |
|------------------------|--------------------------|
| Item                   | Dimensions               |
| A1                     | 88mm ± 0.1               |
| A2                     | 76.2mm ± 0.1             |
| A3                     | 64.6mm ± 0.1             |
| A4                     | 130mm ± 5                |
| A5                     | 10mm ± 5                 |
| A6                     | 130mm ± 5                |
| B1                     | 41.2mm ± 0.1             |
| B2                     | 4.3mm ± 0.1              |
| C1                     | 28mm ± 0.1               |
| C2                     | 2mm ± 0.1                |
| a                      | 1.5mm <sup>2</sup> ± 0.1 |
| D                      | 2.26mm ± 0.1             |
| Gross Weight: 0.053 KG |                          |



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Data subject to change