





## **Datasheet**

# WiZ Pro RGBTW Bridge Box I 12-24V 929002613309

## **Enabling connected lighting system for welcoming spaces**

Philips WiZ Pro RGBTW bridge box can work with constant voltage LED transformer to enable color and tunable white 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
- CE certified

## **Application**

- Residential
- Hospitality
- Restaurant
- Retail
- School
- · Leisure places

#### **Features**

- PWM dimming method with 5 channel ouputs
- · Suitable for both independent and built-in usage
- · Energy metering feature with 10% accuracy
- · Max 180W 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 RGBTW Bridge Box I 12-24V	
12NC	929002613309	
Pieces per box	40 pcs	

## **Product Data**

All specifications are typical and at 25  $^{\circ}\text{C}$  Tcase unless otherwise specified.

## Electrical data

Specification item	Value	Unit	Conditions
Rated input voltage	1224	Vdc	Performance range
Rated input current	7.5	A	@ Max output power
Max input power	180	W	Max output power Max Rated input voltage
Rated output current	7.5A max total 7.5A max per channel	А	
Standby power	0.50	W	@ Rated input voltage
ESD	4KV @ HBM, 8KV @ air		

#### Notes:

- 1) Compatible with Constant Voltage SELV driver only.
- 2) For impeccable color or CCT rendering when connected with TW/RGBTW bridge box, it is recommended to use LED strip/luminaire with CCT range 2700K-6500K. Other CCT range might lead to unexpected light effect that is different from App setting.

## Dimming Interface

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

#### RF interface

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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	113		

## 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

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Specification item	Value	Unit	Conditions	
Ambient temperature	-20+50	°C		
Relative humidity	1090	%		
Tcase_life	70	°C		
Tcase_max	70	°C		

## Storage temperature and humidity

Specification item	Value	Unit	Conditions
Ambient temperature	-25+85	°C	
Relative humidity	595	%	

#### 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	CE, UKCA, RED, WFA, BQB, R-NZ, Independent installation		
Environment	RoHS, REACH		
Connection	Wi-Fi IEEE802.11 b/g, BLE 4.2		
Audible noise	< 24 dB @5cm		
Ingress Protection	IP20		

#### Notes:

- 1) Hereby, [Signify] declares that the radio equipment type [WiZ bridge boxes] is in compliance with Directive 2014/53/EU (RED). The full text of the EU declaration of conformity is available at the following internet address: wizconnected.com.
- 2) SRRC: 本设备包含型号核准代码 (分别) 为: CMIIT ID:2018DP1904的无线电发射模块

## **Energy Metering**

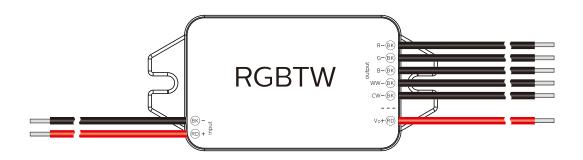
Specification item	Value	Unit	Conditions
Energy Metering accuracy	<10	%	@ Full power

#### 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 -;
			Tolerance: +/- 0.1mm <sup>2</sup>
Output Wire Type for RGBTW negative	1.5	mm <sup>2</sup>	Strand wire, Black; Tolerance: +/- 0.1mm <sup>2</sup>
Output Wire Type for RGBTW 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



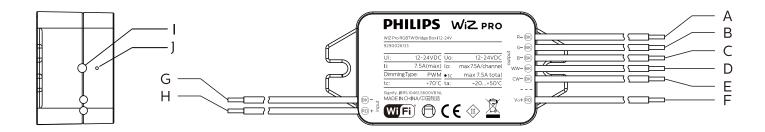
## Example of connection:



- 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 **SELV constant voltage driver** output connectors.

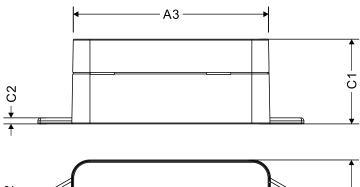
## Wire definition:

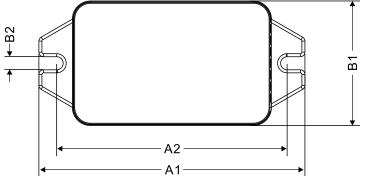
	Specification item	Definition	Remark
А	R (-) - Black	Output: R LED strip	
В	G (-) - Black	Output: G LED strip	
С	B (-) - Black	Output: B LED strip	
D	WW (-) - Black	Output:Warm White LED strip	
Е	CW (-) - Black	Output:Cool White LED strip	
F	Vo (+) - Red	Output: LED strip V+	
G	V (-) - Black	DC power supply negative input	
Н	V (+) - Red	DC power supply positive input	
I	Push button	Reset button	
J	LED light	LED light	



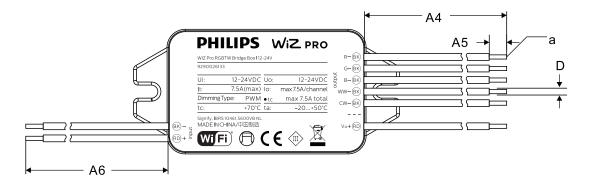
## Dimensions and weight

Specification item	Value	Unit	Conditions
Dimensions L x W x H	88 x 41.2 x 28	mm	Tolerance: +/- 0.1mm
Color	White		
Weight	57	gram	

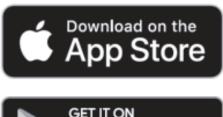




Data sheet			
Item	Dimensions		
A1	88mm	± 0.1	
A2	76.2mm	± 0.1	
А3	64. 6mm	± 0.1	
A4	130mm	<b>±</b> 5	
A5	10mm	<b>±</b> 5	
A6	130mm	<b>±</b> 5	
B1	41. 2mm	± 0.1	
B2	4.3mm	± 0.1	
C1	28mm	± 0.1	
C2	2mm	± 0.1	
a	1. 5mm²	± 0.1	
D	2. 26mm	± 0.1	
Gross Weight: 0.057 KG			



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