PHILIPS

Wireless

Wireless 1-10V Bridge Box

929001461462

Datasheet

Wireless

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The wireless 1-10V bridge box has 1-10v analog voltage output interface, which can be connected with the drive power supply with 1-10v interface.By adjusting the output voltage of the 1-10v interface and adjusting the power of the drive power, lighting dimming can be achieved.At the same time, this equipment has the switch control function, can cut off the loop's ac power supply.
This device can communicate with gateway, dimmer panel, gateway APP and other intelligent terminal devices to realize local and remote control.

Benefits

- Inbuilt relay on and off control
- 1-10v range dimming analog voltage output
- Wireless access without control wires
- Simply connect the traditional dimming products to the control system to achieve mobile APP control

Features

- ZIGBEE protocol compliance, intelligent linkage with other ZIGBEE products
- ZIGBEE protocol compliance (ZHA)
- Lighting on and off, used for switching control of electrical appliances
- Lighting 1-10V dimming power supply dimming control
- Lighting, opening and closing places

Application

- Office
- Classroom
- Hotel
- Home

December 2018

Ordering Information

Commercial product name	12NC	Carton Quantity
Wireless 1-10V Bridge Box	929001461462	60 pcs

Product Data

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

Physical Information	
Overall Dimensions	87.5 mm x 41 mm x 28 mm
Net Weight per Piece	71 gr
Material	ABS + PC (V0 AC3100)
Color	Dark-gray

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	<300	W	@ rated input voltage
Input voltage AC range	202...254	Vac	Operational range
Input frequency AC range	47.5...63	Hz	Operational range
Standby power	<0.8	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	
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
DC Analog Voltage	0.9...10.5	Vdc	
Voltage output accuracy	5	%	
Max Output current	20	mA	

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

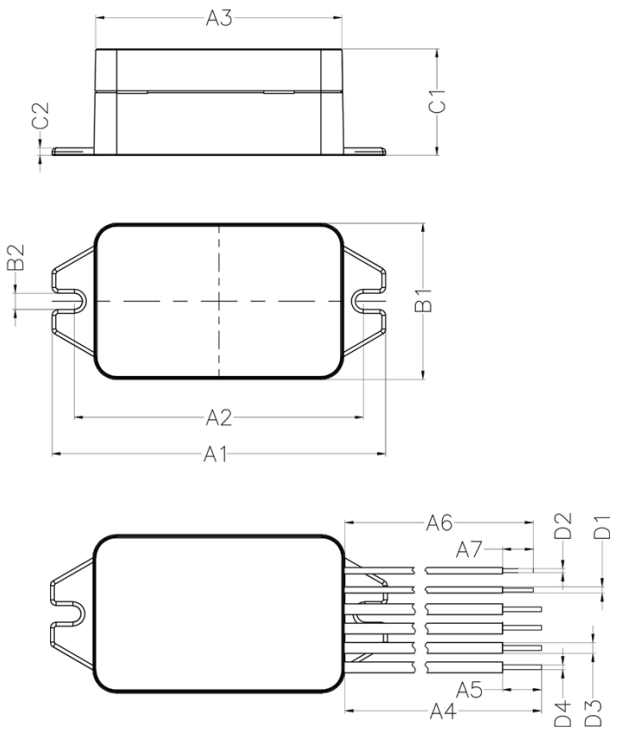
Specification item	Value	Unit	Conditions
Lifetime	50000	Hours	Measured temperature at Tcase-point is Tcase-life. Maximum failures=10%
Mains switching cycles	100000	Switches	

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)



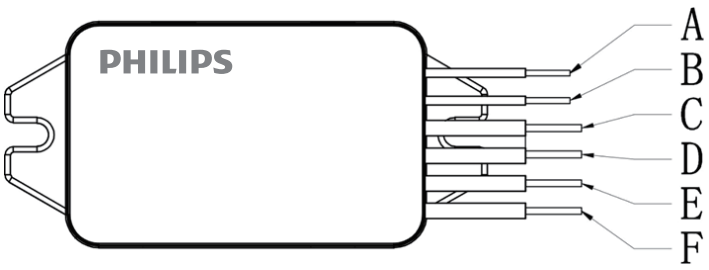
Data Sheet	
Item	Dimensions
A1	87.5 +/- 0.1
A2	75.8 +/- 0.1
A3	64.6 +/- 0.1
A4	130 +/- 1
A5	10 +/- 1
A6	80 +/- 1
A7	8 +/- 1
B1	41 +/- 0.1
B2	4.3 +/- 0.1
C1	28 +/- 0.1
C2	2 +/- 0.1
D1	1.6 +/- 0.1
D2	1.0 +/- 1
D3	2.8 +/- 0.1
D4	1.2 +/- 1

Wiring & Connections

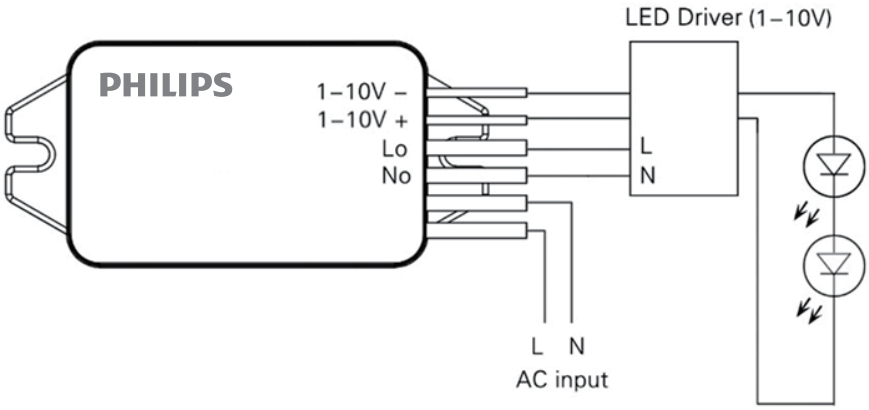
1. Disconnect the power supply line;
2. Use accessory screws to fix the product through the u-shaped groove on both sides;
3. Plug the zero or fire wire of the product into the power supply line;
4. Connect the output zero and fire line of the product with the zero and fire input line of LED regulating optical drive power;
5. Connect the positive and negative output of the product 1-10v to the dimming interface 1-10v of LED dimmer drive power supply;

Pin Definition

Specification item	Definition	Remark
A: 1-10V- Black wired	1-10V negative polarity output	
B: 1-10V+ Red wired	1-10V positive polarity output	
C: Lo Grey wired	Live output	
D: No White wired	Neutral output	
E: N Blue wired	Neutral input	
F : L Brown wired	Live input	



Example connections



12/2018
Data subject to change

www.lighting.philips.co.uk/oem-emea/products/connected-lighting