

2.4G/300Mbps PoE Wireless Bridge BWB2101 Series Datasheet



Ideal for:



Telecom



Hotels & Resorts



Universities



Healthcare



Public Places



Airport



Transport



Industries

OVERVIEW

BWB2101 wireless bridge is a high-performance, high-stability 2.4GHz multi-purpose wireless transmission product developed by BORN. The wireless transmission rate is up to 300Mbps, and the built-in 8dBi high-gain directional antenna is adopted, so that the distance between receiving and transmitting can reach 1KM. BWB2101 wireless bridge supports relay, which can realize long-distance wireless signal transmission, in addition, it also supports gateway and AP functions, which is suitable for wireless networking and wireless coverage. It adopts dust-proof, waterproof, and lightning-proof housing and antenna, which can work stably for a long time in various outdoor environments. It supports DC12V power supply/48V POE main/standby dual power supply and remote reset functions for easy management. It can realize point-to-point, point-to-multi-point, and outdoor wireless coverage and other applications to meet the wireless transmission coverage requirements of elevator monitoring, rural areas, factory districts, scenic spots, squares, and other indoor and outdoor environments.

FEATURES

1. High gain antenna, 300M high-speed transmission

- Adopt 802.11n MIMO wireless technology, provide 300Mbps wireless transmission rate.
- Built-in high gain dual-polarized antenna, the signal is stronger and the transmission is farther.

2. Engineering-level hardware design, professional outdoor transmission

- Qualcomm high-performance enterprise-level chips, industrial-grade materials, high-speed and stable
- anti-interference, meet the needs of various installation environments.
- Industrial-grade integrated molding shell, with IP61 dustproof, waterproof, adaptable to various harsh
- environments such as wind and sun, rain, snow, and freezing, and can work normally and stably even in
- extremely high and low-temperature environments (-40°C~70°C).

3. Easy to install and easy to maintain

- The factory settings are free of matching. Support one-key quick digital pairing, easy and efficient.
- Support point-to-point, point-to-multi-point data transmission, centralized management.
- The installation is simple and convenient, and the signal strength is intelligently indicated.

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TECHNICAL SPECIFICATION

Model	BWB2101		
Interface Characteristics			
Fixed Port	1*10/100M 48V PoE PD port(Data/Power) 1*DC5521 12VDC power port		
Ethernet Port	10/100Base-TX auto-sensing,Full/half duplex MDI/MDI-X self-adaption		
Twisted Pair Transmission	10BASE-T: Cat3,4,5 UTP(≤100 meter) 100BASE-TX: Cat5 or later UTP(≤100 meter)		
Chip Parameter			
Chip	AR9531, 650MHz		
Network Protocol	IEEE802.3u 100Base-TX, IEEE802.11b/g/n		
DDR2 Memory	64MB		
Flash	8MB		
RF Design	Dual-stream single frequency, 2T2R 300M MIMO technology		
Working Frequency	2.4~2.4835GHz,802.11b/g/n		
Transmit Power	18dBi		
Antenna Type	Built-in dual-polarization directional antenna, horizontal 60 degrees, vertical 30 degrees, gain 8dBi		
Transmission Rate	300Mbps		
Wireless Transmission Distance	1km(Max)		
LED Indicator	System: SYS (green), network: NET (green), signal indicator: (green)		
Reset Switch	Yes, Press for 20 seconds and release to restore factory settings		
RF Parameter			
Modulation Mode	OFDM=BPSK,QPSK, 16-QAM, 64-QAM		
Receiving Sensitivity	802.11n(2.4GHz)	802.11g	802.11b
	-90dBm @ MCS0	- 90dBm @ 6Mbps	- 95dBm @ 1Mbps
	-70dBm @ MCS7	- 72dBm @ 54Mbps	- 90dBm @ 11Mbps
	-90dBm @ MCS8		
	-68dBm @ MCS15		

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Transmit Power	802.11n(2.4GHz) (± 1.5 dBm)	802.11g(± 1.5 dBm)	802.11b(± 1.5 dBm)
	14dBm@ MCS0~2/MCS8~10	18dBm @ 6~24Mbps	18dBm @ 1~11Mbps
	14dBm @ MCS3/MCS11	18dBm @ 36Mbps	
	14dBm @ MCS4/MCS12	16dBm @ 48Mbps	
	14dBm @ MCS5/MCS13	16dBm @ 54Mbps	
	14dBm @ MCS6/MCS14		
	14dBm @ MCS7/MCS15		

Power	
Power Supply Mode/ Input Voltage	12VDC or 48V Passive PoE power supply
Power Consumption	Standby<3W, Full Load≤5W
Power Supply	Wall-mounted style 48VDC PoE power supply. Input AC:100~240V 50-60Hz 0.5A

Physical Parameter	
Operation TEMP / Humidity	-40~+70°C;5%~90% RH Non condensing
Storage TEMP / Humidity	-40~+75°C;5%~95% RH Non condensing
Dimension (L*W*H)	147.5*81*44mm
Net /Gross Weight	<0.2kg / <1.0kg
Installation	Pole-mounted, Wall-mounted

Certification & Warranty	
Lightning protection / protection level	Port lightning protection: 6KV 8/20us; Protection level: IP61
Warranty	3 years, lifelong maintenance.

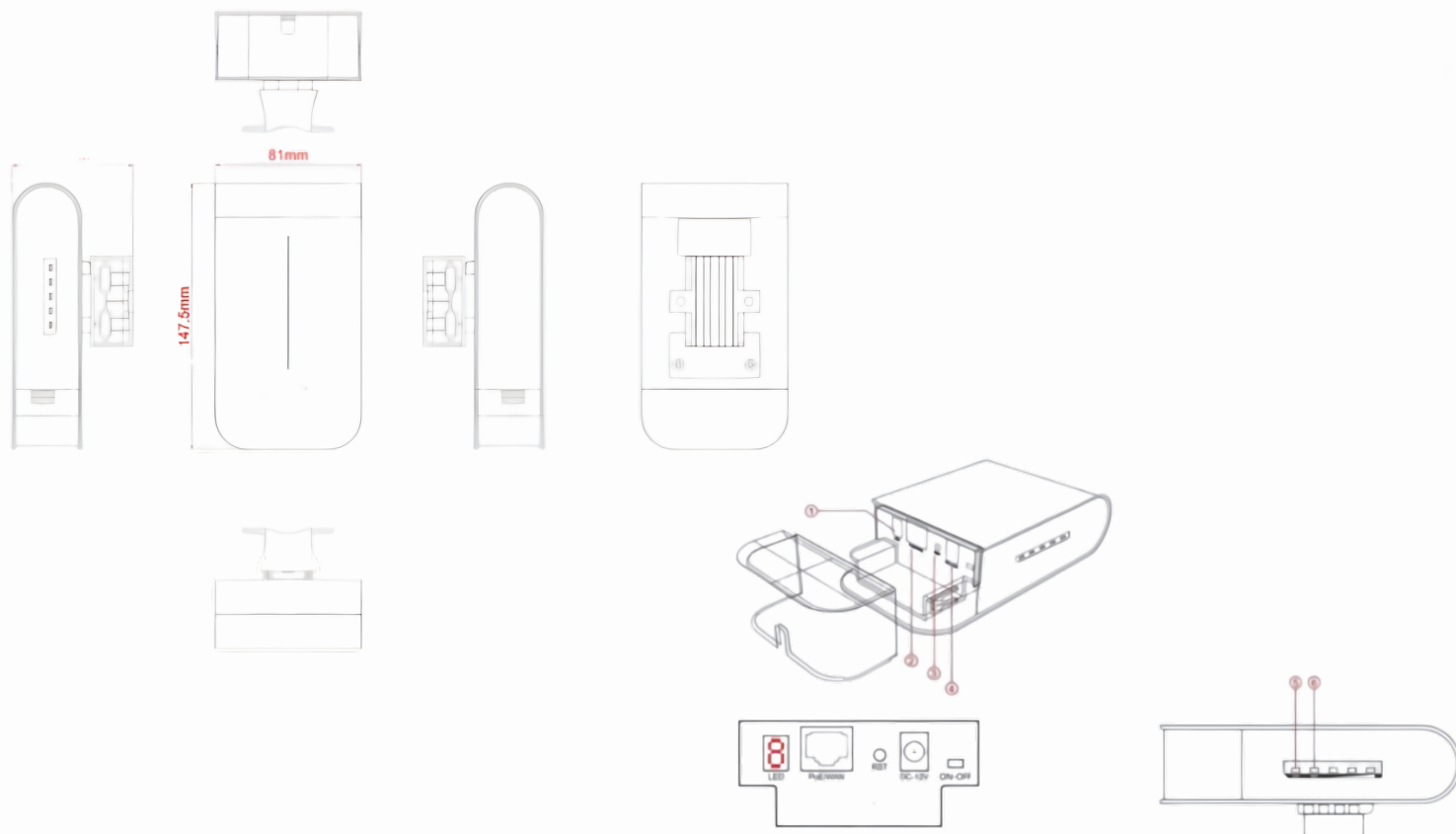
Software Features	
Operating Mode	Wireless bridge mode or AP mode or universal interrupt mode
Wireless Set-up	BSSID Automatically select the signal channel Distance control 802.1x ACK time output Multiple SSIDs, Max 4 can be configured
Wireless Security	Hide SSID WPA/WPA2 (WPA-EAP uses TKIP) WPA/WPA2 (WPA-PSK uses TKIP or AES) WEP, 64/128/152 bit WEP security password

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System Set-up	WEB configuration (HTTP/remote login)
Software Upgrade	WEB webpage or TFTP to upgrade the software
User Management	Configurable user and password
System Monitoring	Equipment and network status statistics
Log	Local log, host log, file transfer log
Restore Set-up	Restore factory default set-up
Backup Function	Back up the system configuration and restore the user's configuration when needed

DIMENSION



- ① Indicator—Wireless bridge status
- ② PoE/WAN port—PoE power supply and data transmission
- ③ Reset port—Press for 20 seconds and release to restore factory setting
- ④ DC port—Wireless bridge power supply, free choice of PoE or DC power supply
- ⑤ SYS—System working indicator
- ⑥ NET—Network working indicator

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ORDERING INFORMATION

Model	Description	Recommended Power Supply
BWB2101	2.4G/300Mbps PoE wireless bridge can support 1*10/100M 48VDC passive PoE power supply, transmission distance 1km, pole-mounted installation	48VDC POE power supply

Note: The wireless bridge does not include 48VDC POE power supply and needs to be purchased separately.

PACKING LIST

	Content	Qty	Unit
PACKING LIST	2.4G/300Mbps PoE wireless bridge	1	Pair
	Double head RJ45 network cable	2	PC
	Hanging ear and stainless steel band	1	Pair
	User Guide	1	SET



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