Anybus Wireless Bridge II – Ethernet

Anybus® Wireless Bridge enables you create an industrial wireless connection in an industrial Ethernet network. This second generation of the proven and trusted Wireless Bridge can communicate via both Bluetooth and Wireless LAN and is ideal for communication through hazardous areas or hard-to-reach locations where cables are not desirable. It provides an effective wireless range of up to 400 meters.

BRIDGING TCP/IP ETHERNET

The Wireless Bridge makes it possible to operate leading TCP/IP based industrial Ethernet networks, such as BACnet/IP, PROFINET, EtherNet/IP and Modbus TCP, over Bluetooth and Wireless LAN 2.4 / 5 GHz.

POINT-TO-POINT OR MULTIPOINT

Point-to-point or multipoint Anybus Wireless Bridge is often used as an Ethernet cable replacement (point-to-point communication). But it can also be used as an access point for up to seven Wireless LAN/Bluetooth clients.

FEATURES & BENEFITS

- Use with point-to-point wireless Industrial Ethernet installations through hazardous or hard-to-reach locations
- Use as an Access Point for up to seven clients
- Suitable for AGV's (Automatic Guided Vehicle)
- Fast Roaming (IEEE 802.11r), High link speed (IEEE 802.11n), Robustness (three internal antennas, including MIMO)
- Eliminates the need for expensive or maintenance-heavy cabling
- Bridges TCP/IP Ethernet and protocols such as: BACnet/IP, EtherNet/IP, Modbus-TCP and PROFINET
- Max range of up to 400 meters
- Full compatibility with Anybus Wireless Bolt — a wireless product for machine mounting
- Easy setup via push button or web interface
- Advanced configuration with AT commands
- Compatible with PROFIsafe requirements
- Rugged IP65 rated industrial design
- Security features for a secure industrial operation
- Three built in antennas for higher performance and better robustness
- Operation with Wirelesss LAN, Bluetooth classic and Bluetooth Low Energy.
- CLI (Command Line Interface) for configuration and diagnostics
- **Starterkit available**

WIRELESS LAN INTERFACE

- Wireless standards: WLAN 802.11 a, b, g, n, d.
- Operation modes: Access point or Client
- WiFi channels: 2.4 GHz, channel 1-11 + 12-13 depending on regulatory domain scan.
- 5 GHz Access Point: 36-48 (U-NII-1), 5 GHz Client: 100-116 + 132-140 and 120-128 depending on regulatory domain scan. (U-NII-1, U-NII-2, U-NII-2e).
- RF output power: 18 dBm EIRP (including max antenna gain 3dBi)
- Max number of slaves for access point: 7
- Power consumption: 54mA@24VDC

- Net data throughput: 20 Mbps. Link speed: max 130 Mbps (802.11n 2x2 MIMO)
- Security: WEP 64/128, WPA, WPA-PSK and WPA2, TKIP and AES/CCMP, LEAP, PEAP.

BLUETOOTH INTERFACE

- Wireless standards (profiles): PAN (PANU & NAP)
- Operation modes: Access point or Client
- RF output power: 14 dBm EIRP (including max antenna gain 3dBi)
- Max number of slaves for access point: 7
- Power consumption: 36 mA@24VDC
- Net data throughput: ~1 Mbps
- Bluetooth version support: Classic Bluetooth v2.1
- Security: Authentication & Authorization, Encryption & Data Protection, Privacy & Confidentiality, NIST Compliant, FIPS Approved

BLUETOOTH LOW ENERGY

- Wireless standards (profiles): GATT
- Operation modes: Central or Peripheral (pending)
- RF output power: 10 dBm EIRP (including max antenna gain 3dBi)
- Max number of simultaneous connections for Central: 7
- Power consumption: 36 mA@24VDC
- Net data throughput: ~200 kbps
- Bluetooth Low Energy version: 4.0 dual-mode
- Security: AES-CCM cryptography

ETHERNET INTERFACE

- Supports Ethernet protocols: IP, TCP, UDP, HTTP, LLDP, ARP, DHCP Client/Server
- Supports wireless bridging of Industrial Ethernet protocols: BACnet/IP, EtherNet/IP, Modbus-TCP, PROFINET
- Ethernet interface: 10/100BASE-T with automatic MDI/MDIX cross-over

CUSTOMER STORY

1080 MOTION: ANYBUS WIRELESS TECHNOLOGY USED FOR ATHLETE TESTING

Anybus Wireless Bridge enables data from 1080 Motion's neuromuscular testing machines to be transferred wirelessly to a computer for immediate display.

LOOKING FOR CAN TO BLUETOOTH? TAKE A LOOK AT OUR IXXAT® CANBLUE II

CANblue II

Wireless CAN Bridge for Bluetooth - range 200m

→ Product details

Technical specifications

Wired interface	Ethernet 10/100 Mbit/s
Dimensions (H•W•D)	93 x 68 x 33mm
Weight	120g or 0,26 lbs
Operating temperature	-30 to +65 °C or -22 to +149 °F (Storage temp: -40 to +85 °C)
Power supply	9-30 VDC (-5% +20%), Cranking 12V (ISO 7637-2:2011 pulse 4). Reverse polarity protection.
Power consumption	0.7W idle, 1.7W max
Enclosure material	Plastic PC/ABS (Bayblend FR3010)

Wired interface	Ethernet 10/100 Mbit/s	
Mechanical rating	IP65	
Mounting	Two screws (Ø 4 mm) on flat surface. DIN rail mount option available (optional accessory).	
Max range	400 meters	
Configuration	Three different methods: • Accessing the built-in web pages in the product • Using Easy Config modes (via push button or inside web interface) • Sending AT commands	
Connectors	1x M12 for Ethernet (4-pin, D-coded) 1x M12 for Power 5-pin, A-coded) RP-SMA antenna connector for external antenna	
Antennas	AWB3000 Three internal antennas: 1. 2.4 GHz 2. 2,4GHz MIMO 3. 5GHz	AWB3010 One external antenna: 1. 2,4/5GHz dual band
	The external antenna does not provide better range, but allows connectivity if the Wireless Bridge needs to be placed inside a radio-secure environment such as a steel cabinet. When mounting inside a steel cabinet antenna cables with magnetic foot or screw mount should also be considered.	
CERTIFICATIONS		
Europe	ATEX: ATEX Category 3, zone 2 according to EN60079-15, product marking: EX II 3 G nA IIC T4. 2014/53/EU Radio Equipment Directive (RED)	
USA	FCC 47 CFR part 15, subpart B. UL: Ind. Cont. Eq. also Listed Ind. Cont. Eq. for Haz. Loc. CL1, DIV 2, GP A,B,C,D,T4. UL file: E203225	
Canada	ICES 003	
Japan	MIC	
Other countries	Australia, Colombia, Turkey, Malaysia, Peru, Mexico, Argentina. Brazil, India, Philippines, South Africa, Korea.	
WLAN Security	WEP 64/128, WPA, WPA-PSK and WPA2, TKIP and AES/CCMP, LEAP, PEAP.	
Bluetooth Security	Authentication & Authorization, Encryption & Data Protection, Privacy & Confidentiality, NIST Compliant, FIPS Approved	

Content of delivery

AWB3000 (WITH INTERNAL ANTENNAS) / AWB3010 (WITH EXTERNAL ANTENNA)
Quick start documentation
Power supply **not** included

Optional Accessories

Order Code: 023040
Accessory Pack – 1.5 meter Ethernet Cable with RJ45 connector
and World power supply with 1.5 meter cable and M12 connector.
Order Code: 024700
IP67 M12 connector kit for power and Ethernet,
with screw terminals
Order Code: 024701
DIN clip with screws
Order Code: 024702
Replacement external antenna. Foldable, dual band.
RPSMA connector
Order Code: 024711
Swivel Mount kit for Anybus Wireless Bridge
Including 1x Swivel Mount bracket, 2x slim clamps and 2x mounting screws
1.04.0085.00000
Magnetic antenna foot with 1,5 m cable and
RPSMA connector, excl. antenna.
1.04.0085.00003
Screw-mount antenna base with 1,5 m cable
and RP-SMA connector, excl. antenna

Wireless bridge complete cable kit
- All you need to make your Ethernet cable go wireless!
Order code: **AWB3003**
2 pcs Anybus Wireless Bridge II (internal antennas)
2 pcs Ethernet cables 2 meters, M12 + open leads
2 pcs ”click mount” Ethernet RJ45 connectors
2 pcs Power cables 2 meters M12 + open leads

Wireless bridge starterkit
Order code: **AWB3300**
Two Wireless Bridges with internal antennas,
Two Power Supplies (world), cabling, Quick Start Guide

(Limitation: Max one Starterkit per customer)

Ordering Information

Order code	AWB3000 (WITH INTERNAL ANTENNAS) AWB3010 (WITH EXTERNAL ANTENNAS)

Quick start documentation, USB configuration cable are included. Configuration software is available for download.

Power supply is **not** included. 3 year guarantee. For purchasing instructions and terms and conditions, see: → How to buy

---

Copyright © 2020 HMS Industrial Networks - All rights reserved.