

司騰達公司致力於推廣數位化工廠和 IIOT 工業物聯網的解決方案,並與歐洲最先進的公司 – HMS 集團合作,同時透過引進更多歐美的技術能量,提供客戶關於工業 4.0 的顧問諮詢服務,並將教育與産業連結,協助台灣産業逐步完成從現場設備、生産資訊、通訊 IOT 的垂直整合,並整合 M2M 工業總線與軟體開發,從而實現數位化工廠與自動化機械領域的創新。





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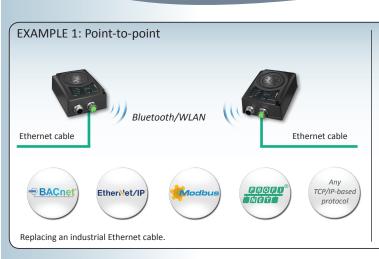
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# Wireless Bridge II

Anybus Wireless Bridge enables you create a robust wireless connection between two points in an industrial Ethernet network. This second generation of the proven and trusted product can communicate via both Bluetooth and WLAN and is ideal for communication through hazardous areas or hard-to-reach locations where cables are not desirable.







The Wireless Bridge can act as an access point connecting up to seven different slaves. This example shows connection to several Anybus Wireless Bolts. (The Anybus Wireless Bridge and Bolt work seamlessly together.)

### **Availability**

#### AWB3000

Ethernet bridge via Bluetooth and WLAN. 2.4 GHz/5 GHz. Internal antenna.

Ethernet bridge via Bluetooth and WLAN. 2.4 GHz/5 GHz. External antenna.

#### Accessories

#### 023040

Cable kit. 1.5m Ethernet cables M12/RJ45 and power supply (world).

#### 024700

M12 Connector Kit with screw terminals.

#### 024701

DIN Clip kit with screws.

#### 024702

Extra external antenna, Foldable, dual band, RP-SMA connector.

#### 1.04.0085.00000

Magnetic antenna foot with 1.5 m cable and RP-SMA connector, excl. antenna.

#### 1.04.0085.00003

Screw-mount antenna base with 1,5 m cable and RP-SMA connector, excl. antenna)



HMS provides a full 3 year product

### Wirelessly bridge industrial Ethernet networks

Use the Anybus Wireless Bridge to create a wireless connection in a PROFINET, EtherNet/IP, Modbus-TCP or BACnet/IP network. You can use the same hardware for both Bluetooth or WLAN communication.

#### 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 several WLAN/Bluetooth nodes within range.

#### Features and benefits

- Range up to 400 meters.
- Rugged design with IP65-classed housing.
- Unique method to handle interference disturbances.
- Easy configuration via push button or via web configuration pages.
- Full compatibility with Anybus Wireless Bolt a wireless product for machine mounting.
- Compatible with PROFIsafe requirements.

#### WLAN or Bluetooth?



- Allows higher data throughput.
- · Wide market acceptance.
- Wireless LAN client adapter in an infrastructure setup

#### **Bluetooth**

- · Even more robust and noise immune wireless link since Bluetooth switches between different frequencies. AFH (Adaptive Frequency Hopping) automatically avoids noisy channels.
- · Preferred physical media for wireless PROFINET (PNO) and approved for PROFIsafe.



TECHNICAL SPECIFICATIONS	
Type of wired interface	Ethernet
Order code	AWB3000 (with internal antenna) AWB3010 (with external antenna)
Range	400 meters (WLAN and Bluetooth)
Antenna	Internal: 2.4 GHz: max 2dBi. 5 GHz: 0.5 max dBi External: Max 3 dBi (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)
Operating Temperature	-30 to +65 °C (Storage temp: -40 to +85 °C)
Weight	120 g
Housing	Plastic PC/ABS (Bayblend FR3010)
Protection class	IP65
Dimensions	91 x 66 x 36.2 mm
Mounting	With two screws (Ø 4 mm) on flat surface. DIN rail mount option available (optional accessory).
Connectors	M12 for Ethernet (4-pin, D-coded). M12 for Power (5-pin, A-coded)
Wireless communication	WLAN or Bluetooth (interchangeable with same hardware)
Power	9-30 VDC (-5% +20%), Cranking 12V (ISO 7637-2:2011 pulse 4). Reverse polarity protection. (Consumption: 0.7W idle, 1.7W max.)
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
Vibration compatibility:	Sinusoidal vibration test according to IEC 60068-2-6:2007 and with extra severities; Number of axes: 3 mutually perpendicular (X:Y:Z), Duration: 10 sweep cycles in each axis, Velocity: 1 oct/min, Mode: in operation, Frequency: 5-500 Hz. 5-8,4Hz=±3.5mm; 8,4-40,7Hz=1g; 40,7-57Hz=±0,15mm;57-500Hz=2g.  Shock test according to IEC 60068-2-27:2008 and with extra severities; Wave shape: half sine, Number of shocks: ±3 in each axis, Mode: In operation, Axes ± X,Y,Z, Acceleration: 30 m/s², Duration: 11 ms.
Humidity compatibility:	EN 600068-2-78: Damp heat, +40°C, 93% humidity for 4 days.
WIRELESS STANDARDS	
WLAN	Wireless standards: WLAN 802.11 a, b, g, e, i, h (n in pending release)  Operation modes: Access point or Client Wifi channels: 2.4 GHz, channel 1-11.  5 GHz Access Point: 36-48 (U-NII-1), 5 GHz Client: 36-140 (U-NII-1, U-NII-2A, U-NII-2C).  RF output power: 16 dBm Max number of slaves for access point: 7  Power consumption: 54mA@24VDC  Net data throughput: ~20 Mbps Security: WEP 64/128, WPA, WPA-PSK and WPA2, TKIP and AES/CCMP, LEAP, PEAP.
Bluetooth	Wireless standards (profiles): PAN (PANU & NAP) Operation modes: Access point or Client RF output power: 10 dBm Max number of slaves for access point: 7 Power consumption: 36 mA@24VDC Net data throughput: ~1 Mbps Bluetooth version support: v4.0 Security: Authentication & Authorization, Encryption & Data Protection, Privacy & Confidentiality, NIST Compliant, FIPS Approved
Bluetooth Low Energy (Pending release)	Wireless standards (profiles): GATT Operation modes: Central or Peripheral RF output power: 7 dBm Max number of slaves for Central: 7 Power consumption: 36 mA@24VDC Net data throughput: ~200 kbps Bluetooth version support: v4.0 Security: AES-CCM cryptography
CERTIFICATIONS	
Europe	1999/5/EC, Radio and Telecommunication Terminal Equipment (R&TTE), EN 300 328 V1.9.1 (2015-02), EN 301 893 V1.8.1 (2015-09). ATEX (Pending): ATEX/IECEX Category 3, zone 2 according to EN 60079-0 and EN 60079-7.
U.S.	FCC 47 CFR part 15, subpart B. UL OrdLoc: NRAQ-Programmable Controllers according to UL61010-2-201 and NRAQ7-Process control equipment according to CSA61010-2-201, UL file E214107.  UL HazLoc: NRAQ-Programmable Controllers according to USL ANSI/ISA-12.12.01 (class 1 Div. 2) and
	CNL C22.2, Nos. 213-M1987, UL file E203225. (Pending)
Canada Japan	CNL C22.2, Nos. 213-M1987, UL file E203225. (Pending)  ICES-003  MIC (pending, pre-certified radio module)







Configuration
You can configure the Anybus Wireless Bridge by accessing the built-in web pages in the product. You can also use the push-button. Pressing sequences will configure the product. Instructions included.



Order a Starter Kit!

Includes: Two Wireless Bridges, Two Power Supplies (world), cabling, Quick Start Guide. Part number: AWB3300

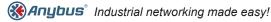
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NCC (pending, pre-certified radio module)

KCC (pending, pre-certified radio module)



Japan Taiwan

South Korea (pending)

# 司騰達股份有限公司

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