Anybus Wireless Bridge enables you create a robust wireless connection in an industrial Ethernet network. This second generation of the proven and trusted product 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.

**EXAMPLE 1: Point-to-point**
Replacing an industrial Ethernet cable.

**EXAMPLE 2: Access point**
The Wireless Bridge can act as an access point connecting up to seven different clients. This example shows connection to several Anybus Wireless Bolts and one Wireless Bridge. The Anybus Wireless Bridge and Bolt work seamlessly together.

**Availability**

- **AWB3000**
  Ethernet bridge via Bluetooth and WLAN. 2.4 GHz/5 GHz. Internal antennas.

- **AWB3003**
  Anybus Wireless Cable kit:
  - 2 pcs Anybus Wireless Bridge II (AWB3000 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

- **AWB3010**
  Ethernet bridge via Bluetooth and WLAN. 2.4 GHz/5 GHz. External antenna.

**Accessories**

- **023040**
  Accessory Pack: 1.5m Ethernet cables M12/RJ45 and power supply (world).

- **024700**
  M12 Connector Kit with screw terminals.

- **024701**
  DIN Clip kit with screws.

- **024702**

- **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 2 m cable and RP-SMA connector, excl. antenna.

**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**

- Three built in antennas for higher performance and better robustness.
- Operation with Bluetooth Low Energy.
- Range up to 400 meters.
- Rugged design with IP65-classed housing.
- Easy setup via push button or via web configuration pages.
- Full compatibility with Anybus Wireless Bolt — a wireless product for machine mounting.
- Connects to your machine via Ethernet.
- Simultaneous operation of Bluetooth and WLAN allowing for bridging between the two.

**Which wireless standard?**

**Use WLAN (aka WiFi) if:**

- Interaction with other devices is needed, e.g. Bolt/AWB II to tablet/PC/phone or WLAN infrastructure.
- WLAN channel frequency planning is possible.
- Higher data throughput speed is necessary.
- Larger file transfers are expected.

**Use Bluetooth if:**

- The wireless link has Anybus products in both ends, e.g. Bolt to Bolt, AWB II to AWB II or Bolt to AWB II.
- A robust and reliable link without interruptions is important e.g. in an industrial environment with lots of disturbances, and maybe has been proven not to work well using WLAN.
- A Profinet or Ethernet/IP I/O cycle time of 64ms or higher is acceptable.
- The data throughput speed need is on the lower side.

HMS provides a full 3 year product guarantee.
**TECHNICAL SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Type of wired interface</th>
<th>Ethernet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order code</td>
<td>AWB3000</td>
</tr>
<tr>
<td></td>
<td>AWB3010</td>
</tr>
<tr>
<td>Antenna</td>
<td>Three internal antennas: 1. 2-4 GHz 2. 2.4 GHz MIMO 3. 5 GHz</td>
</tr>
<tr>
<td></td>
<td>One external antenna: 1. 2.4/5 GHz dual band</td>
</tr>
<tr>
<td>(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)</td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>Up to 400 meters free line of sight</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-40 to +65 °C (Storage temp: -40 to +85 °C)</td>
</tr>
<tr>
<td>Weight</td>
<td>120 g</td>
</tr>
<tr>
<td>Housing</td>
<td>Plastic PC/ABS (Bayblend FR3010)</td>
</tr>
<tr>
<td>Protection class</td>
<td>IP65</td>
</tr>
<tr>
<td>Dimensions</td>
<td>93 x 68 x 33 mm</td>
</tr>
<tr>
<td>Mounting</td>
<td>With two screws (Ø 4 mm) on flat surface. DIN rail mount option available (optional accessory).</td>
</tr>
<tr>
<td>Configuration</td>
<td>Three different methods:</td>
</tr>
<tr>
<td></td>
<td>- Accessing the built-in web pages in the product</td>
</tr>
<tr>
<td></td>
<td>- Using Easy Config modes (via push button or inside web interface)</td>
</tr>
<tr>
<td></td>
<td>- Sending AT-commands via Telnet/Raw TCP</td>
</tr>
<tr>
<td>Vibration compatibility</td>
<td>Sinusoidal vibration test according to IEC 60068-6-2:2007 and with extra severities: Number of axes: 3 mutually perpendicular (X/Y/Z); Duration: 10 sweep cycles in each axis; Velocity: 1 cm/sec; Mode: in operation, Frequency: 5-500 Hz: 5-8,4Hz=±3.5mm; 8,4-40,7Hz=2g; 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: 30g, Duration: 11 ms.</td>
</tr>
<tr>
<td>Humidity compatibility</td>
<td>EN 60068-2-78: Damp heat, +40°C, 93% humidity for 4 days.</td>
</tr>
</tbody>
</table>

**WIRELESS STANDARDS**

**Wireless LAN**

- Wireless standards: WLAN 802.11 a, b, g, n, d (fast roaming).  
- Operation modes: Access point or Client  
- WiFi channels: 2.4 GHz, channel 1-11 = 12-13 depending on regulatory domain scan.  
- RF output power: 18 dBm EIRP (including max antenna gain 3dB) |
| Max number of slaves for access point: 7 |
| Power consumption: 54mA@12VDC |
| Net data throughput: 20 Mbps. Link speed: max 130 Mbps (802.11n 2x2 MIMO) |
| Security: WEP 64/128, WPA, WPA2, TKIP and AES/CCMP, LEAP, PEAP. |

**Classic Bluetooth**

- Wireless standards (profiles): PAN (PANU & NAP)  
- Operation modes: Access point or Client  
- RF output power: 14 dBm EIRP (including max antenna gain 3dB)  
| 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  

**Bluetooth Low Energy**

- Wireless standards (profiles): GATT  
- Operation modes: Central or Peripheral (pending)  
- RF output power: 10 dBm EIRP (including max antenna gain 3dB)  
| Max number of simultaneous Peripheral connections: 7  
| Max number of Peripherals is virtually unlimited by multiplexing.  
| Power consumption: 36 mA@24VDC  
| Net data throughput: ~200 kbps  
| Bluetooth version support: Bluetooth 4.0 dual-mode  
| Security: AES-CCM cryptography |

**CERTIFICATIONS**

**Europe**

- FCC 47 CFR part 15, subpart B.  
- ICES-003  
- MIC

**Order a Starter Kit!**

Includes: Two Wireless Bridges (AWB3000), Two Power Supplies (world), cabling, Quick Start Guide.  
Part number: AWB1300

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