

## Wireless connectivity solutions





# Connect with the leading experts in industrial wireless communication

and secure wireless connections. throughout the product life cycle. You can rely on Anybus, the most widely used brand for industrial Award-winning Anybus technology: network connectivity.

Focus on the growth and evolution Get support from the world leading of your core business, without experts in industrial communication, worrying about how to obtain robust quiding you from your first inquiry

> Our core technology has been voted best-in-class by both analysts and users.



# Prepare for the future by going wireless with HMS Networks

Anybus Wireless - powerful industrial wireless solutions for all applications in the modern factory.

Factory floors, warehouses and other industrial environments are complex and challenging places for wireless networking. The equipment often needs to operate in dusty areas, extreme temperatures or in locations with a lot of different disturbances like moving objects. A wireless network can transform your operations in a very positive way, but only if it is powerful and stable enough. The Anybus Wireless Solutions were developed with this in mind, to meet the demands of your industrial applications.

Working seamlessly together, Anybus Wireless Solutions cover every aspect of modern industrial requirements for infrastructure, machine access and cable replacement.

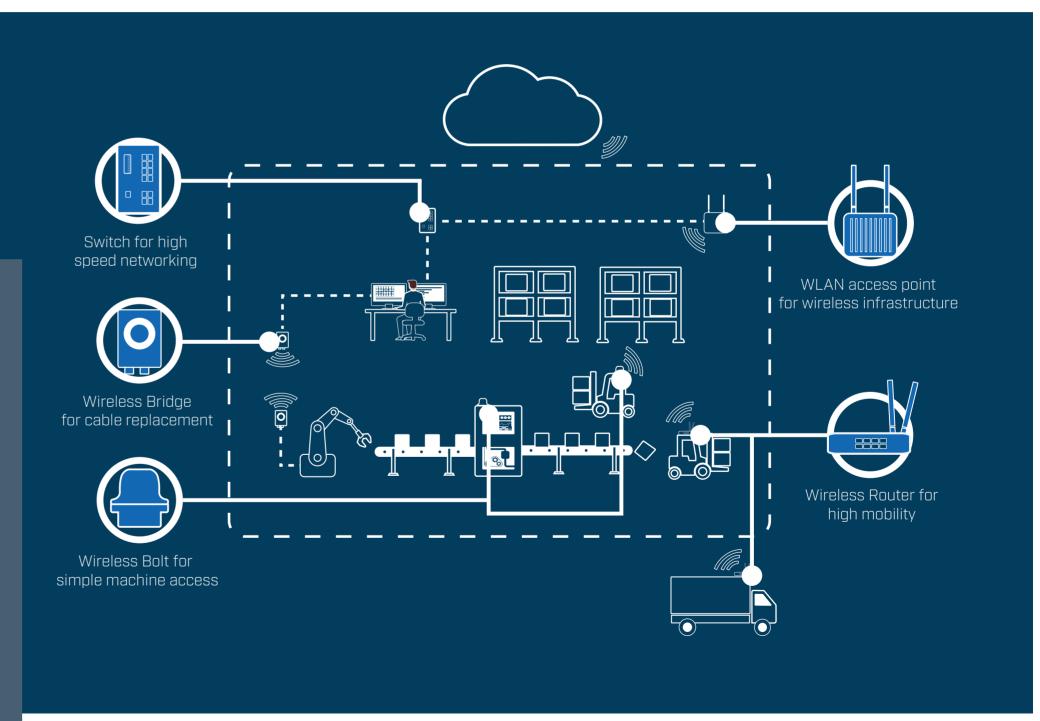












# Anybus Wireless Bridge

- for replacement of serial or Ethernet cabling with a robust wireless connection



#### Unwire!

Anybus® Wireless Bridge™ is ideal for system integrators needing to establish a robust wireless connection for industrial use. The Wireless Bridge is often used in pairs as a cable replacement, but can also be used as an access point connecting up to seven clients.

#### Bridges industrial protocols

Use the Anybus Wireless Bridge to create a wireless connection in a PROFINET, EtherNet/IP, Modbus-TCP, BACnet/IP network or any other TCP/IP-based protocol. You can use the same hardware for both Bluetooth and WLAN communication. There is also a separate version making it possible to bridge serial RS-232/422/485 communication over Bluetooth.

Range Up to 400 meters

**Mounting** DIN-rail or wall-mounted

IP class IP67

**Configuration** Push-button or web-based

**Connector** M12 (DSUB on serial version)

Wired Ethernet

Antenna

Wireless WLAN, Bluetooth and Blue-

tooth LE

Three internal antennas or

one external

# Anybus Wireless Bolt

- for wireless machine access and simple mobility



#### Make machines easy to access

Anybus® Wireless Bolt™ is ideal for machine builders wanting to enable wireless access to their machines. The Wireless Bolt is mounted on the machine or the cabinet and connects to the application via Ethernet or serial communication.

#### All-in-one solution

With Anybus Wireless Bolt you get an all-in-one package featuring connector, communication processor and integrated antenna in the same unit, with an exterior IP67 protection class.

#### Improve outdoor connectivity

The white version of Wireless Bolt - the "Sunbolt" - absorbs 30% less sunheat than the black Wireless Bolt, making it a perfect fit for outdoor applications.

Range	Up to 100 meters
Mounting	Screwed onto the machine/cabinet (M50 hole, 50.5 mm)
IP class	IP67 outside (IP21 inside)
Configuration	Web based, AT Commands or Easy Config modes
Connector	2x9-pin plug connector alternatively 3-pin power connector and RJ45 connector with PoE (inside the machine).
Wired	Ethernet or Serial RS232/485
Wireless	WLAN, Bluetooth and Blue- tooth LE
Antenna	One internal antenna

# Anybus Wireless Routers

- for high speed wireless connections and full mobility



#### Industrial grade wireless connectivity

The Anybus Wireless Routers are ideal for high-speed WLAN and LTE connectivity. Advanced routing functionality allows you to segment your network and protect mission critical data. An extensive range of redundancy technologies ensures uninterrupted operations. The ruggedized design makes the routers ideal for a wide variety of industrial applications.

#### World wide and future proof coverage

The Wireless Routers can be used world-wide, independent of regulatory domains. Upcoming additions to this range will also include 5G-ready cellular routers.

Cellular LTE Cat.4 2x2 MIMO, 4G/3G/2G

Fall Back LTE-FDD: B1/B2/B3/B4/B5/B7/

B8/B12/B13/B18/B19/B20/B25/B26/B28 LTE-TDD: B38/B39/B40/B41

WCDMA: B1/B2/B4/B5/B6/B8/B19

**WLAN** Selectable 2.4GHz or 5GHz- IEEE

802.11ac/a/b/g/n

**Ethernet** LAN: 8 x 10/100Base-TX RJ45, Auto Nego-

tiation, Auto MDI/MDI-X

WAN: 1 x 100/1000Base-T RJ45. Auto

Negotiation, Auto MDI/MDI-X

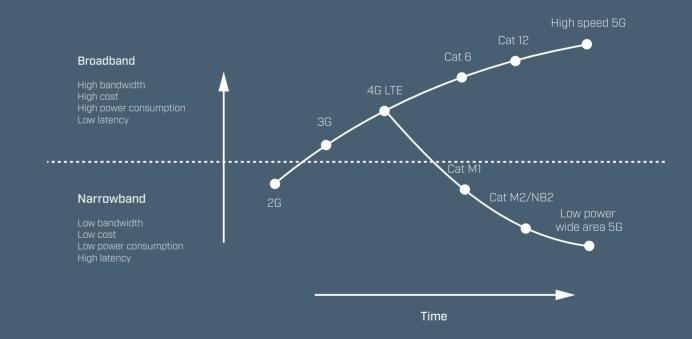
**Mounting** DIN-rail

IP class IP31

**Configuration** CGI WebGUI, SSH, Telnet, SNMP, HTTPS

# 5G just around the corner

With the arrival of 5G, the manufacturing industry faces its biggest transformation yet. Safer, flexible and more efficient manufacturing systems will be possible thanks to the ultra-low-latency and reliability of 5G connectivity.



## It's not only about speed

The standardization of 5G is ongoing within 3GPP. At the same time venders are trying out the technology in selected factories around the world. The initial phase of 5G deployment is based on 3GPP release 15. This release is primarily focused on enhanced mobile broadband (eMBB) and is mainly intended for early deployment of residential wireless broadband service.

3GPP release 16 will be the release covering Ultra-Reliable Low Latency Communications (URLLC). This release is intended to be ready at the end of 2019. 5G radio modules and network infrastructure supporting release 16 are expected early 2020. Deployment in factories will follow later in 2020, starting with AGVs and mobile workers.

# Anybus Wireless Bolt IoT

- for wireless access to remote applications anywhere



Data speeds

Wireless

## Get industrial grade Internet connectivity anywhere

The Anybus Wireless Bolt IoT enables simple and efficient access to good cellular connectivity, avoiding antenna cable loss. The Wireless Bolt IoT is up-to-date with the latest LTE standards NB-IoT and CAT-M1. The Bolt IoT uses a 2G (GPRS/EDGE) fallback mechanism for deployment almost anywhere in the world.

#### Low power usage

Low power/sleep mode is perfect for connecting remote equipment powered by battery, wind or solar panels.

Expected release first half of 2020.

Screwed onto the machine/cabinet Mounting (M50 hole, 50.5 mm) IP67 and UL NEMA 4X for top IP class (outside the host), IP21 for bottom (inside the host) Configuration 1. Accessing the built-in web pages via Ethernet. 2. Sending REST-commands via Ethernet. Connector RJ45 Ethernet/PoE, 3 Pole screw connector for power Wired Ethernet

B19, B20, B26, B28

Peak Download Rate Cat-M1:

4G LTE: Category Cat-M1 and NB-

IoT. Frequency Bands B1, B2, B3, B4, B5, B8, B12, B13, B17, B18,

2G: EDGE, GPRS 850, 900, 1800,

300kbps, NB-IoT: 27kbps

# Anybus Infrastructure

- for a robust and reliable backbone to your wireless network



## Create a WLAN infrastructure with Anybus Access Points

The Anybus Wireless LAN Access Point allows users to set up an industrial wireless infrastructure. It is available in two versions, one for IP30 (indoor) applications and one for IP67 (outdoor).

#### Switches for ultra-high data throughput

The intelligent Anybus Switches provide full Gigabit and ultra-high throughput. Multiple redundancy and cyber security features enable a highly reliable and secure network.

### Supply your products with power through the Ethernet cable

The Anybus Power over Ethernet Injectors make it possible to supply a product with power through an Ethernet cable, removing the need for additional power cables.



Work with HMS.
The number one choice for industrial communication and IIoT.

#### HMS Networks - Contact

HMS is represented all over the world. Find your nearest contact here:

www.hms-networks.com/contact



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