



Industrial networking made easy™





# **Anybus gateways:** *Industrial networking made easy*™



## Connecting devices to fieldbus and industrial Ethernet networks

In the world of industrial automation, there are many different networks available. This is challenging for device manufacturers, machine builders, system integrators and end users who need to connect different machines and networks which do not speak the same language.

Anybus gateways offer quick and easy network integration by acting as translators between industrial networks and industrial devices — wired or wirelessly.

With more than 300 unique gateway versions to choose from, the Anybus X-gateway™ and Communicator™ families offer solutions for any type of connectivity issue, whether it is a network-to-network or device-to-network situation.



## Why Anybus gateways?

### Quick and easy

Anybus gateways are by far the quickest way to achieve connectivity between networks and devices. All gateways include fully implemented fieldbus and industrial Ethernet interfaces making them ready to connect your equipment to any desired network.

You easily set up the network connection with the included software (Anybus Configuration Manager). No programming is needed and you are up and running within minutes.

### Proven and trusted

Millions of devices are connected to fieldbus and industrial Ethernet networks via Anybus technology.

Anybus gateways have successfully connected devices, machines and networks for more than 20 years, opening up new applications and business possibilities for industrial companies in all areas.

Users include Rockwell Automation, Siemens, Schneider Electric, Mitsubishi etc.

MILLIONS OF DEVICES **CAN'T BE WRONG** 





Solving connectivity problems on the

factory floor



**Network-to-network connectivity** 

**Extend a production line** Extend an existing production segment by connecting new machines that communicate on other networks.

**Upgrade to industrial Ethernet** The easy way to migrate from fieldbus to industrial Ethernet. Retrofit an old PLC system, and connect it to a newer system, keeping existing I/O modules and wiring infrastructure.

Make PLCs talk to each other Connect two PLC systems from different brands such as Siemens, Rockwell, Schneider Electric, Mitsubishi, Beckhoff, ABB etc.

**Create network segments** Divide a network topology into logical segments. Create clear cuts between different parts of the plant, both logical and electrical.

**Connect enterprise systems** Integrate factory floor data with enterprise level systems

such as SCADA, SAP, OPC etc. Anybus gateways are included in most of the major PLC manufacturers' system building software making it easy for you to integrate them into your network design.

ANYBUS COMMUNICATOR™



**Device-to-network connectivity** 



If you are system integrator or plant owner, you can choose the best automation device for your needs, regardless of manufacturer.

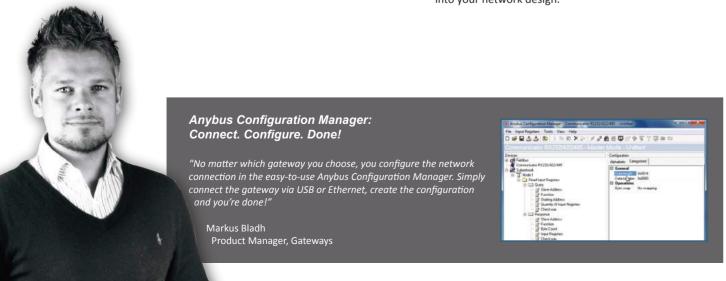
If you are a machine builder or device manufacturer, you can make your machines compatible with any network — the fastest and easiest way to enter a new

ANYBUS WIRELESS BRIDGE™

Wireless cable replacement — Serial or Ethernet

**Connect devices wirelessly** 

Create a robust wireless connection to an industrial device via WLAN or Bluetooth, Ideal for communication through hazardous areas or hard-toreach locations where cables are not desirable.



## Connect to any network with Anybus gateways





# Connect any two industrial networks — fieldbus or industrial Ethernet

Anybus X-gateways help you to easily connect any two networks, enabling a consistent information flow throughout the entire plant. You get fast transfer of cyclic I/O data between two networks, offloading the PLC from working with additional complex calculations.

X-gateways are tested and proven with all leading manufacturers of PLCs such as Siemens, Allen Bradley, Schneider Electric, Mitsubishi, ABB, Omron, Hitachi, Beckhoff, Phoenix Contact, Bosch Rexroth and more.

### **Easy configuration**

The connection between the two networks is quickly set up in the Anybus Configuration Manager software which means that no programming is required. Just connect, configure, and you're done.



## **Anybus X-gateway**

- Gateways for conversion between any two networks
- Over 250 versions covering most network combinations
- Easy configuration via the Anybus Configuration
   Manager software
- Master/slave or slave/slave versions available

## Specialized gateways for different networks:



# CANopen to any network

Specialized X-gateway for CANopen connectivity. Acts as CANopen master/client to 10 other networks



Modbus TCP to any network

Specialized X-gateway for Modbus TCP connectivity. Acts as Modbus TCP master/ client to 10 other networks.



BACnet to Modbus

Allows Modbus devices to communicate on a BACnet network.



Modbus RTU to TCP

Allows Modbus RTU devices to communicate on a Modbus TCP network.

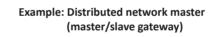
The Anybus X-gateway is economical, robust, and proven technology.

Jeffrey Moore Sytech, USA

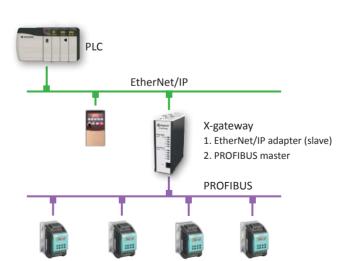
HMS' Anybus products are very sound, functional and easy-to-use compared to other similar devices that we tried.

Marino Gobita SPAMI, Italy



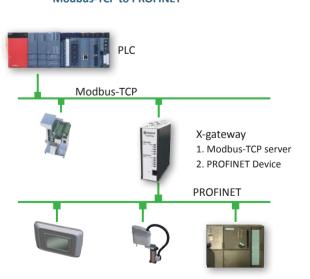


EtherNet/IP to PROFIBUS



# Example: PLC to PLC communication (slave/slave gateway)

Modbus-TCP to PROFINET





# Connect any device to a fieldbus or industrial Ethernet network

Anybus Communicator is a family of protocol converters that connect devices to all major industrial networks. The Communicator is capable of converting almost any standard or user specific (proprietary) protocol. This means that you do not have to worry about making any hardware or software changes to your device. Simply connect a Communicator and you will be able to connect to any network.

### Easy configuration

You configure your device through the Anybus Configuration Manager software. No programming is required. Just connect, configure, and you're done.



### **Communicator RTU**

- Protocol converters for devices with Modbus RTU
- Connectivity to 13 different networks
- Modbus RTU master functionality on the serial side
- Easy 6-step visual configuration wizard within the Anybus Configuration Manager software



# Communicator RS232/422/485

- Protocol converters that offer flexible serial frame building
- Connectivity to 13 different networks
- Supports ASCII or vendor-specific protocols
- For Request/Response or Produce/ Consume protocols



### Communicator CAN

- Protocol converters with flexible CAN frame building
- Connectivity to 11 different networks
- For devices with CAN 2.0A and B based protocols

No other company has standard solutions available to return data from such a mixed set of equipment.

Alexis Ducancel Genzyme, France

We wanted something that was solid and easy to use. The Anybus Communicator CAN was just that.

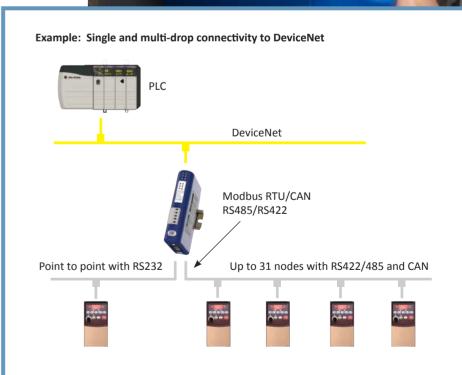
Tomas Holmquist, Berg Propulsion, Sweden



### Communicator DF1

- Protocol converters for devices with Rockwell DF1
- Connectivity to 13 different networks
- Includes an easy visual DF1 configuration method
- Supports PLC5/SLC500, Guard and many more





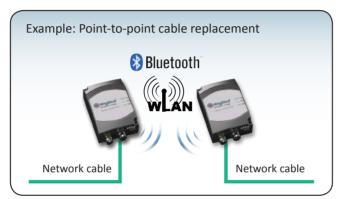


# Replace serial or Ethernet cabling with a robust wireless connection

Anybus Wireless Bridge enables you create a disturbance-free wireless connection to an industrial device. The solution is ideal for communication through hazardous areas or hard-to-reach locations where cables are not desirable.

Wireless transmission is made via Bluetooth or WLAN technology and there are several versions available for both serial and industrial Ethernet communication.





The Anybus Wireless Bridge is often used as cable replacement to hard-to-reach locations but it can also be used to connect several wireless nodes.



Ethernet over WLAN Point-to-point



Ethernet over Bluetooth

Point-to-point or multipoint

Serial over Bluetooth

Point-to-point or multipoint

# Proven and trusted by the world's leading industrial companies





## "These things just have to work"

Anybus technology gives network access to millions of devices all around the world. It is used by industrial giants such as ABB, Bosch, Mitsubishi, Siemens, Schneider Electric and Rockwell Automation and incorporates technology from the network founders. This ensures that you get a fast and reliable communication link that will last a long time.

Anybus gateways are high-quality products which come with 3-year guarantees. In addition, HMS offers free and global technical support.

Also, technical services from HMS help projects move forward smoothly and successfully, from idea to fully implemented and deployed solution.



"HMS takes full responsibility for the entire supply chain including manufacturing and delivery. With our focus on quality and a widespread international distribution network, you can rest assured that you get solid connectivity solutions on time.

We currently have an on-time delivery rate above 98 %. Field returns are less than 0,02 %. These are good numbers, but we always aim to improve.

Katarina Lekander Quality Manager



### **HMS Industrial Networks**

HMS develops and manufactures products under the brands Anybus®, IXXAT® and Netbiter®. These products enable industrial devices to connect to different industrial networks and also be monitored and controlled remotely.

Development and manufacturing take place at the headquarters in Halmstad, Sweden and in Weingarten, Germany. Local sales and support are handled by branch offices in China, Denmark, France, Germany, Italy, India, Japan, UK and USA, plus distributors in more than 50 countries.



# www.anybus.com

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