Industrial gateways/bridges designed to connect any TWO industrial networks

- Profibus
- Profinet IO
- DeviceNet
- EtherNet/IP
- ControlNet
- CANopen
- CC-Link
- AS-Interface
- Modbus Plus
- Modbus-RTU
- FIPIO
- Interbus
- and many more...

X-gateway
Connect between almost any TWO industrial networks. Take a closer look at the Anybus X-gateway family. More than 170 versions are available!

The Anybus X-gateway family is a product line consisting of 170 different products aimed to connect almost every possible combination of two industrial networks. The product family supports 17 different fieldbus networks such as Profibus, DeviceNet, CANopen and CC-Link as well as many industrial Ethernet versions. The Anybus X-gateways are designed for use in industrial automation plants where increasingly many different industrial networks are used. The X-gateways help system integrators to easily interconnect between two networks enabling transparent information flow throughout the entire plant.

Easy setup without any programming!

The Anybus X-gateways are designed for use in harsh industrial environments featuring standard DIN rail mounting, IP 20 rating and 24 Volt DC power supply. The X-gateways are intelligent stand alone devices supporting fanless operation and industrial operating temperature range. The design is based upon two embedded Anybus communication modules and one additional gateway processor. Thanks to the wide range of Anybus-S slave and Anybus-M master modules, more than 170 X-gateway combinations are available. No programming is needed and the setup is done in a few minutes. Simply choose the gateway version that supports the two networks you want to connect. For each of all possible network combinations, there is one separate gateway. This gives you a flexible and versatile solution that is based on proven Anybus technology.

I/O data transfer
The X-gateways primarily focuses on the transfer of cyclic I/O data between two networks. This can either be a slave><slave combination or a master><slave combination. During the setup of the gateway, the user simply selects the amount of I/O to be transferred between network 1 and network 2. Since all industrial networks supports a different amount of I/O data, the network with the least amount of I/O data determines how much data can be transferred in each case. The transfer time between the 2 networks is typically 10-15ms.

Web and OPC Server functionality for all Ethernet versions
The Anybus X-gateway family has support for the industrial Ethernet protocols Modbus-TCP, EtherNet/IP and Profinet. These Ethernet versions feature additional IT-functions such as, a dynamic Web-server with support for SSI-scripts, Flash file system and FTP-server.

OPC Server support
All Ethernet versions of the X-gateway features support for the OPC server. This is made possible through the HMS Ethernet transport provider. The transport provider creates a channel for process data between the gateway and a PC and its OPC server.

Bridging between PLC brands
With over 170 gateways versions available the X-gateways can bring together the network worlds of Siemens, Rockwell, Schneider, Mitsubishi, Hitachi, Bosch, Moeller, B&R, Beckhoff and many more.

Connecting fieldbusses with Ethernet
As HMS supports all major fieldbus and industrial Ethernet standards, the X-gateways are the perfect solution to integrate existing fieldbus installations into modern industrial Ethernet networks.

Easy Configuration
All X-gateways are pre-configured for 20 bytes I/O. For this case, no additional configuration is necessary. For larger I/O sizes the X-gateway is configured through its serial configuration interface.

WHY USE X-GATEWAYS?

- Simple way to transmit I/O data between any two industrial networks
- Instant connectivity - no programming
- Robust stand alone product for harsh industrial environments
- Over 170 possible combinations including Master (Scanner, Client, Controller), and Slave (Adapter, Server, Device) functionality
- Tailor made for brand labelling and customization
Available combinations supporting:
- Profibus
- Profinet
- DeviceNet
- EtherNet/IP
- ControlNet
- CANopen
- CC-Link
- Interbus
- Lonworks
- AS-Interface
- Modbus-TCP
- Modbus Plus
- Modbus RTU
- FIP IO
- J1939

**Typical uses within a factory network**

**FIELDBUS TO FIELD BUS**
In this example, the X-gateway is a Slave on the CC-Link network and a Master/Scanner on the DeviceNet network

**FIELDBUS TO ETHERNET**
In this example, the X-gateway is a Slave/Adapter on the EtherNet/IP network and a Profibus-DP Master on the Profibus network

**KEY FEATURES**
- Bridging of I/O data between two industrial networks
- Fast I/O data exchange between networks, normal transfer time is 10-15 ms depending on network types
- Rugged aluminum housing
- DIN-rail mounting - PE via DIN rail
- Based on proven Anybus technology
- Easy configuration via Windows Hyper Terminal
- Supports 170 different network combinations
- “IT functions” such as Web server with SSI support, FTP server and File access/security functionality included on all versions with Ethernet
- OPC Server for all Anybus X-gateway versions supporting Ethernet
- comDTM provided by HMS supporting FDT technology

**TECHNICAL SPECIFICATION**
- Size: 126 x 110 x 42 mm (L x W x H)
- 4.96 x 4.33 x 1.65” (L x W x H)
- DIN-rail mountable
- Protection class IP20
- Power supply: 24 VDC
- Operating temperature: 0 °C to + 65 °C
- 32 °F to + 149 °F
- EMC Compliance: CE Marked
- Emission: EN 50081-2
- Immunity: EN 50082-2
- UL and cUL Compliance: E203225
- ATEX Certification: 135419
- Fieldbus conformance: tested and verified Anybus technology
- RoHS compliance
| Part No | Part No | Part No | Part No | Part No | Part No | Part No | Part No | Part No | Part No | Part No | Part No | Part No | Part No | Part No | Part No | Part No | Part No | Part No |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| AB7800  | AB7829  | AB7646  | AB7801  | AB7802  | AB7803  | AB7804  | AB7805  | AB7806  | AB7807  | AB7808  | AB7809  | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | AB7810  |
| AB7820  | AB7631  | AB7648  | AB7821  | AB7822  | AB7823  | AB7824  | AB7825  | AB7826  | AB7827  | AB7828  | AB7829  | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     |
| AB7632  | AB7633  | AB7634  | AB7833  | AB7834  | AB7835  | AB7836  | AB7837  | AB7838  | AB7839  | AB7840  | AB7841  | AB7842  | AB7807  | AB7866  | AB7867  | AB7868  | AB7869  | AB7870  |
| AB7649  | AB7650  | AB7651  | AB7853  | AB7854  | AB7855  | AB7856  | AB7857  | AB7858  | AB7859  | AB7860  | AB7861  | AB7862  | AB7863  | N/A     | N/A     | N/A     | N/A     | N/A     |
| AB7832  | AB7634  | AB7652  | AB7843  | AB7844  | AB7845  | AB7846  | AB7847  | AB7848  | AB7849  | AB7850  | AB7851  | AB7852  | AB7853  | AB7800  | N/A     | N/A     | N/A     | N/A     |
| AB7833  | AB7635  | AB7844  | AB7854  | AB7855  | AB7856  | AB7857  | AB7858  | AB7859  | AB7860  | AB7861  | AB7862  | AB7863  | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     |
| AB7834  | AB7636  | AB7845  | AB7864  | AB7865  | AB7866  | AB7867  | AB7868  | AB7869  | AB7870  | AB7871  | AB7872  | AB7806  | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     |
| AB7835  | AB7637  | AB7866  | AB7867  | AB7868  | AB7869  | AB7870  | AB7871  | AB7872  | AB7873  | AB7874  | AB7875  | AB7876  | AB7877  | AB7878  | AB7879  | AB7880  | AB7811  | N/A     |
| AB7836  | AB7638  | AB7847  | AB7867  | AB7868  | AB7869  | AB7870  | AB7871  | AB7872  | AB7873  | AB7874  | AB7875  | AB7876  | AB7877  | AB7878  | AB7879  | AB7880  | AB7811  | N/A     |
| AB7837  | AB7639  | AB7848  | AB7858  | AB7867  | AB7868  | AB7869  | AB7870  | AB7871  | AB7872  | AB7873  | AB7874  | AB7875  | AB7876  | AB7877  | AB7878  | AB7879  | AB7880  | AB7812  |
| AB7838  | AB7640  | AB7849  | AB7859  | AB7868  | AB7869  | AB7870  | AB7871  | AB7872  | AB7873  | AB7874  | AB7875  | AB7876  | AB7877  | AB7878  | AB7879  | AB7880  | AB7812  | N/A     |
| AB7839  | AB7641  | AB7850  | AB7868  | AB7869  | AB7870  | AB7871  | AB7872  | AB7873  | AB7874  | AB7875  | AB7876  | AB7877  | AB7878  | AB7879  | AB7880  | AB7812  | N/A     | N/A     |
| AB7840  | AB7642  | AB7851  | AB7869  | AB7870  | AB7871  | AB7872  | AB7873  | AB7874  | AB7875  | AB7876  | AB7877  | AB7878  | AB7879  | AB7880  | AB7812  | N/A     | N/A     | N/A     |
| AB7841  | AB7643  | AB7852  | AB7869  | AB7870  | AB7871  | AB7872  | AB7873  | AB7874  | AB7875  | AB7876  | AB7877  | AB7878  | AB7879  | AB7880  | AB7812  | N/A     | N/A     | N/A     |
| AB7842  | AB7644  | AB7853  | AB7870  | AB7871  | AB7872  | AB7873  | AB7874  | AB7875  | AB7876  | AB7877  | AB7878  | AB7879  | AB7880  | AB7812  | N/A     | N/A     | N/A     | N/A     |
| AB7007  | AB7702  | AB7703  | AB7704  | AB7705  | AB7706  | AB7707  | AB7708  | AB7709  | AB7710  | AB7711  | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     |

Customized versions for specific requirements available on request - Contact your nearest HMS office

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