The Anybus X-gateway CANopen makes it possible to integrate CANopen devices into any other PLC system. The X-gateway CANopen series provide CANopen Master (Manager) /Slave connectivity to all popular fieldbus and industrial Ethernet networks. The gateways' high reliability and flexibility make them an indispensable connectivity tool.

**Features and Benefits**

- Provides CANopen Master or Slave functionality on one side, and fieldbus/Ethernet slave functionality on the other side
- Allows transparent transfer of I/O data between CANopen and another network
- CANopen master functionality allows connection of up to 126 CANopen slaves
- Dual port Ethernet with switch functionality for EtherNet/IP, Modbus-TCP and PROFINET IRT versions
- Ethernet versions with IT functions such as dynamic Web server, supporting downloadable customer specific web pages
- CANopen NMT Master and Configuration Manager functionality

**APPLICATION EXAMPLES**

**Control Network - e.g. PROFIBUS**

- Network interface 1: PROFIBUS slave
- Network interface 2: CANopen Master

**Device level with CANopen slaves**

**Control Network - e.g. EtherNet/IP**

- Network interface 1: EtherNet/IP Adapter
- Network interface 2: CANopen Master

**CANopen Configuration**

The X-gateway CANopen can be configured with the "Anybus Configuration Manager CANopen" which is included in the price of the X-gateway and can be downloaded from www.anybus.com.

The PC connects to the CANopen network via a USB-CAN adapter (ordered separately)

In addition, any standard CANopen configuration tool can be used to configure the CANopen interface.

The uplink fieldbus or Ethernet slave interface is configured with a standard device description file (GSD/EDS) and the standard engineering tool of the PLC. No programming required.

**ACCESSORIES**

- A CAN-to-USB configuration adapter including software and documentation on CD can be ordered separately.

Anybus Configuration Manager CANopen Configuration Kit 021670
Includes: License, CD, USB-CAN adapter

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

X-gateway CANopen

Max amount of slaves: 126
CANopen network connector: DSUB9M
Baud rate: Up to 1 Mbit/s
I/O data: 128 PDOs Receive/128 PDOs Transmit, 510 bytes IN/OUT
Extras: CANopen specification DS301 v4.0.2

Technical Details

<table>
<thead>
<tr>
<th>Weight</th>
<th>110 g, 0.33 lb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions</td>
<td>120×79×27 mm, 4.72×3.07×1.06”</td>
</tr>
<tr>
<td>Protection class</td>
<td>IP20, NEMA rating 1</td>
</tr>
<tr>
<td>Enclosure material</td>
<td>PC ABS, UL 94</td>
</tr>
<tr>
<td>Installation position</td>
<td>Any</td>
</tr>
<tr>
<td>Mounting</td>
<td>DIN rail (35×7.5/15)</td>
</tr>
</tbody>
</table>

Certifications

- UL File number: E2010225
  (File number E21407 for PROFINET RT 2PORT)
- IEC 60068-2-1
  (DSUB 9-Pole male)
- ANSI/ISA-12.12.01-2000
- Zone 2, Cat 2 (except Modbus RTU, PROFINET RT 2PORT)
- EN 60797-15, EN 60797-11
- CE 2004/108/EC
  EN 61000-6-4
  EN 61000-6-2

Electrical Characteristics

- Power: 24 VDC +/- 10 %
- Current consumption: Typical 150 mA
- Voltage: 510 byte IN/OUT
- Protection: Short Circuit
- Enclosure material: PC ABS, UL 94
- Mounting: DIN rail (35×7.5/15)

Hazardous Locations

- Class I, Division 2, Groups A, B, C, and D, T4
- ATEX
- Protection: 2000

Environmental Characteristics

- Operating temp: -25 to 55 °C, -13 to 131 °F
- Storage temp: 40 to 85 °C, -40 to 185 °F
- Relative Humidity: 5-95 %, non condensing
- Installation altitude: Up to 2 000 m
- Immunity and Emission for Industrial Environment
  - Electromagnetic-RF fields: 10 V/m 80 MHz - 1 GHz
  - Fast Transients: +/- 1 kV
  - Surge protection: +/- 1 kV
  - RF conducted interference: 10 V/m
  - Emission: 40 dB 30 MHz - 230 MHz

Single Pack Accessories

- Resource CD
- Installation sheet
- DSUB with screw terminals for subnetwork

NETWORK SPECIFIC FEATURES

1 = Network connector, 2 = Baud rate, 3 = I/O data, 4 = Other

SLAVE / ADAPTER / SERVER / DEVICE

CANopen

- 1 = DSUB9M
- 2 = Up to 1 Mbit/s
- 3 = 510 byte IN/OUT
- 4 = Supports profile CIA DS301 V4.02

ControlNet

- 1 = 2-Wire Cox + R485 (NAP) 2 = 5 Mbit/s
- 3 = 450 byte IN/OUT
- 4 = Media冗余 support

DeviceNet

- 1 = 0 Vdc, 5.08 Phoenix Plug
- 2 = 125-500 kbit/s
- 3 = 510 byte IN/OUT
- 4 = Unconnected Message Manager

EtherCAT

- 1 = 2*RJ45
- 2 = 100 Mbit/s
- 3 = 510 byte IN/OUT
- 4 = Device Level Ring (DLR)

Modbus RTU

- 1 = 2*RJ45
- 2 = 1200-19200 bps
- 3 = 510 byte IN/OUT
- 4 = CANopen connector (DSUB 9-Pole male)

Modbus-TCPIP - 2 port

- 1 = 2*RJ45
- 2 = 10/100 Mbit/s
- 3 = 510 byte IN/OUT
- 4 = Security framework

PROFIBUS

- 1 = 2*RJ45
- 2 = Up to 12 Mbit/s
- 3 = 510 byte IN/OUT
- 4 = Profibus DP (IEC 61158)

PROFINET I/O

- 1 = 2*RJ45
- 2 = 100 Mbit/s
- 3 = 510 byte IN/OUT
- 4 = RT Communication and Cyclic data exchange

PROFINET IRT - 2 port

- 1 = 2*RJ45
- 2 = 100 Mbit/s
- 3 = 220 byte IN/OUT
- 4 = RT and IRT Communication

HMS Industrial Networks – Worldwide

HMS - Sweden (HQ)
Tel: +46 35 17 29 00 (Halmstad HQ)
E-mail: sales@hms-networks.com
HMS - France
Tel: +33 686 386 034 (Mulhouse office)
E-mail: fr-sales@hms-networks.com
HMS - Germany
Tel: +49 721 989777-000
E-mail: ge-sales@hms-networks.com
HMS - UK
Tel: +44 1926 405599
E-mail: uk-sales@hms-networks.com
HMS - China
Tel: +86 010 8532 3183
E-mail: cn-sales@hms-networks.com
HMS - Ireland
Tel: +353 1 214 000
E-mail: ie-sales@hms-networks.com
HMS - France
Tel: +33 686 386 034 (Mulhouse office)
E-mail: fr-sales@hms-networks.com
HMS - Italy
Tel: +39 039 59662 27
E-mail: it-sales@hms-networks.com
HMS - Japan
Tel: +81 45 478 5340
E-mail: jp-sales@hms-networks.com
HMS - Switzerland
Tel: +41 61 511342-0
E-mail: sales@hms-networks.ch
HMS - United States
Tel: +1 312 829 0601
E-mail: us-sales@hms-networks.com