

# Anybus X-gateway – CANopen Master – PROFINET-IO Device

The Anybus X-gateway CANopen provides a seamless connection between a PROFINET network and a secondary CANopen sub-network. This makes it possible to integrate CANopen devices into a PROFINET PLC system.

#### FAST COPYING OF I/O DATA

The X-gateway's primary function is fast transfer of cyclic I/O data between the two networks. I/O data from the PROFINET network is written into CANopen objects that can be mapped into CANopen PDOs and vice versa. The gateway acts as a full Master/Manager on the CANopen network and as a Slave/Device on the PROFINET-IO network. The data transmission between the two networks is completely transparent with a maximum data capacity of 510 bytes in each direction.

#### EASY CONFIGURATION - NO PROGRAMMING REQUIRED!

CANopen configuration can easily be made through the included Anybus Configuration Manager CANopen software, or with any other standard CANopen configuration tool. No programming skills are needed.



#### Features and benefits

- Fast copying of cyclic I/O data between a CANopen and PROFINET network (5 ms)
- Full CANopen Master/Manager functionality, eliminates the need for an PLC controller on the CANopen network
- Connects up to 126 CANopen slave devices
- Proven and tested with all PLC manufacturers
- Easy CANopen configuration via the included Anybus Configuration Manager software. No programming required
- Possibility to build web pages displaying and controlling a factory floor process with data from the other connected network
- Fast, dynamic transfer of fieldbus data to e.g. SCADA/HMI/Enterprise level systems based on Microsoft Windows, via the included Anybus OPC server
- Robust stand-alone housing for use in harsh industrial environments
- · Global free technical support and consultancy

### CANopen Master/Manager Interface

- CANopen Master/Manager implementation according to the CANopen specification DS301 v4.0.2.
- Connects up to 126 CANopen slaves
- Network Management (NMT) messages, to configure and initialize the network.
- Supporting 128 Receive PDOs and 128 Transmit PDOs, each can transfer up to 8 bytes.
- Up to 510 bytes of cyclic data in each direction (PDO)
- PDO message types: COS (Change of State), Cyclic Synchronous, Acyclic Synchronous.
- Synchronization Object (SYNC) is used for synchronizing PDO communication.
- Heartbeat Mechanism to monitor the status of nodes.

ode Guarding/Life Guarding Protocol provides possibility to guard slaves or the master.

ZMCY (Emergency Object) is used for error reporting.

- LSS master functionality
- Can also function as a CANopen Slave

### PROFINET I/O Device/Slave interface

PROFINET IO Device/Slave settings can be made by importing the provided .GSDML file into engineering tool of the controlling PLC.

- Complete PROFINET-IO Soft-Real-Time (RT) communication
- Max 512 bytes of Input and 512 bytes of Output data
- Up to 64 slots / 1 sub slot
- Cyclic data exchange (10 ms cycle time)
- Acyclic Data exchange (Record Data Requests)
- Baud rate 100 Mbit/s
- Integrated FTP server provides easy file management using standard FTP clients
- Web server with dynamic data capability and Server Side Include (SSI) capability
- Email client with dynamic data capability and Event-triggered email handling
- TCP/IP Configuration via DCP (Discovery and Configuration Protocol)
- PROFINET uplink configuration via web interface or .GSDML file
- 1x RJ45 network connector



### Technical specifications

120 x 75 x 27mm or 4,72 x 2,95 x 1,06"
150g or 0,33 lbs
-25 to +55 °C or 0 to +131 °F
-40 to +85 °C or -40 to +185 °F
24 VDC
Typical 150mA
USB (USB to CAN cable not included)
On-board for CANopen node address and baud rate setting
D-sub 9 Male (Included)
(See interface details above)
On both CAN and BUS/Ethernet side

Mechanical rating	IP20, NEMA rating 1	
Mounting	DIN-rail (EN 50022 standard)	
CANopen baudrate	20 kbit/s - 1 Mbit/s	

#### CERTIFICATIONS

UL	File number: E203225	UL 508 Ind. Cont. Eq.
Hazardous Locations	CLASS 1, DIVISION 2, GROUPS A, B, C AND D, T4	ISA-12.12.01-2000
CE	2004/108/EC	EN <u>61000-6-4</u> EN <u>61000-6-2</u>
АТЕХ	Zone 2, Cat 3 (except Modbus RTU)	EN <u>60079-11</u> EN <u>60079-15</u>

File	Version	Size	Read online	

## Ordering information

Order Code	AB7307
Included components	Gateway Quick start documentation Connector terminals Power supply <b>not</b> included PLEASE NOTE: IXXAT USB-CAN configuration adapter (1.01.0281.12001) is not included and
	required for configuration of device Configuration software is available for download Anybus OPC server software available for download.
Accessories	1.01.0281.12001: XXAT USB-to-CAN V2 compact Anybus IPconfig Tool - Utility for module TCP/IP configuration (Windows 32/64-bit) Downloadable under "Files and Documentation"

3 year guarantee. For purchasing instructions and terms and conditions, see:  $\underline{\text{How to buy}}$ 

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