



## Anybus X-gateway – CANopen Master – Modbus TCP Server

The Anybus X-gateway CANopen provides a seamless connection between a Modbus TCP network and a secondary CANopen sub-network. This makes it possible to integrate CANopen devices into a Modbus TCP 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 Modbus TCP 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 Server/Slave on the Modbus TCP 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 Modbus TCP 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

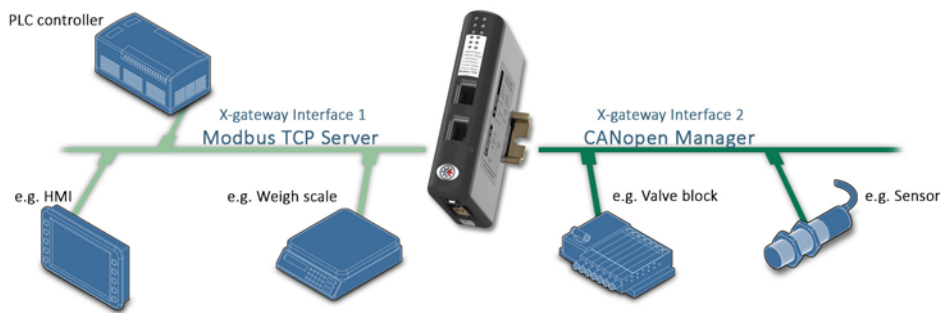
- CANopen Master/Manager implementation according to the CANopen specification DS301 v4.0.2.
- Connects up to 126 CANopen slaves
- Network Management (NMT) messages, to configure and initialize the network.
- Supporting 128 Receive PDOs and 128 Transmit PDOs, each can transfer up to 8 bytes.
- Up to 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.
- Node Guarding/Life Guarding Protocol provides possibility to guard slaves or the master.
- EMCY (Emergency Object) is used for error reporting.

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

## Modbus TCP Slave interface

Modbus TCP Slave settings can be made either via the built-in web interface, or by importing the provided .EDS file into engineering tool of the controlling PLC.

- Conforms to Modbus TCP v1.0
- Modbus TCP class 0, class 1 and partially class 2 slave functionality
- 10/100Mbit operation in full or half-duplex
- 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
- Per-user security framework
- Quality of Service (QoS) available
- DNS Capability
- TCP/IP settings via DHCP/ARP/Anybus IPconfig (HICP)
- Integrated switch allowing for a daisy-chain topology
- 2x RJ-45 ports available simultaneously.



## Technical specifications

<b>Dimensions (L•W•H)</b>	120 x 75 x 27mm or 4,72 x 2,95 x 1,06"
<b>Weight</b>	150g or 0,33 lbs
<b>Operating temperature</b>	-25 to +55 °C or 0 to +131 °F
<b>Storage temperature</b>	-40 to +85 °C or -40 to +185 °F
<b>Power supply</b>	24 VDC
<b>Current consumption</b>	Typical 150mA
<b>Configuration port</b>	USB (USB to CAN cable not included)
<b>Configuration Switches</b>	On-board for CANopen node address and baud rate setting
<b>CANopen connector</b>	D-sub 9 Male (Included)
<b>Fieldbus/Ethernet connector</b>	(See interface details above)
<b>Galvanic isolation</b>	On both CAN and BUS/Ethernet side

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

**CERTIFICATIONS**

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

File	Version	Size	Read online
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## Ordering information

<b>Order Code</b>	AB7308
<b>Included components</b>	<p>Gateway Quick start documentation Connector terminals</p> <p>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</p> <p>Configuration software is available for download Anybus OPC server software available for download.</p>
<b>Accessories</b>	<p>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"</p>

3 year guarantee. For purchasing instructions and terms and conditions, see: [How to buy](#)

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