Anybus®
BY HMS NETWORKS

Anybus X-gateway - Modbus TCP Client - CANopen Slave

The Anybus X-gateway allows you to seamlessly inter-connect PLC control systems and their connected devices between Modbus TCP and CANopen networks.

FAST COPYING OF I/O DATA
The X-gateways primary function is with the fast transfer of cyclic I/O data between the two networks.This offloads your PLC from working with additional calculations. The gateway acts as a Slave on the CANopen network and as a full Master/Client on the Modbus TCP network. The data transmission between the two networks is completely transparent with a maximum I/O data capacity of 256 bytes in each direction.

EASY CONFIGURATION - NO PROGRAMMING REQUIRED!
Configuration is made via Ethernet and a built-in web page. The configuration page is used to configure Ethernet TCP/IP settings, Modbus-TCP client/server configuration and I/O data size transfer between Modbus TCP and the chosen network.

Features and benefits

- Fast copying of cyclic I/O data between a Modbus TCP and a CANopen network (5 ms)
- Allows for the integration of Modbus TCP based server/slave devices into other PLC control systems
- Fulll Modbus TCP Client/Master functionality, eliminates the need for an PLC controller on the Modbus TCP network
- Connects up to 64 Modbus Servers/Slave devices
- Max I/O data capacity of 256 bytes in each direction
- Possibility to build web pages displaying and controlling a factory floor process with data from the other connected network
- SD memory card slot allows for backup, configuration and easy module replacement
- Robust stand-alone housing for use in harsh industrial environments
- Global free technical support and consultancy

Modbus TCP Client/Master interface

Modbus TCP Client and Server setup is made via an included visual web configuration interface without the need for any programming.
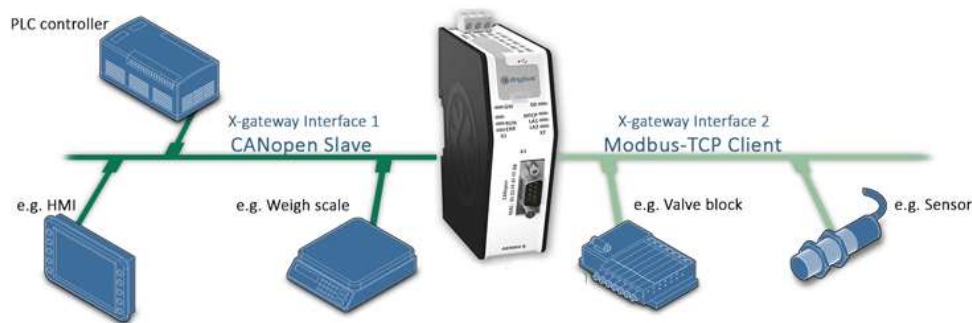- Modbus TCP Client functionality according to Modbus specification V1.1B
- Support for Modbus TCP functions 1, 2, 3, 4, 5, 6, 15, 16, 23
- Connects up to 64 Modbus TCP servers/slaves
- Supports up to max 256 bytes of Input and 256 bytes of Output data
- 10/100Mbit operation in full or half-duplex
- 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
- Downlink Live List providing Modbus-TCP transaction status to uplink PLC

- Control and Status words for downlink network control/status
- Individual Modbus TCP server port number setting
- Byte Swap feature
- Full Modbus address range (1-65536)
- Dual Modbus TCP RJ-45 ports available simultaneously

CANopen Slave interface

CANopen Slave settings can be made either via on-board switches, or by importing the provided .EDS file into engineering tool of the controlling PLC.

- Complete CANopen slave functionality according to CANopen Version 4.02
- Max 512 bytes of Input and 512 bytes of Output data (PDO + SDO)
- Customizable PDO mapping
- Up to 80 RPDO's and 80 TPDO's
- Transmission types: PDO Sync, Change-of-state, Event based and RTR
- Network store/restore functionality
- Heartbeat & Node Guarding support
- Supports CANopen baudrates 10 kbit/s – 1 Mbit/s
- CANopen configuration via .EDS file or via on-board rotary switches
- 1x D-sub 9-pin male CANopen connector

Technical specifications

Dimensions (L●W●H)	110 x 35 x 101 mm or 4,33 x 1,38 x 3,98"	
Weight	160g or 0,35 lbs	
Operating temperature	-25 to +70 °C or -13 to +158 °F	
Storage temperature	-40 to +85 °C or -40 to +185 °F	
Power supply	24 VDC +/- 10 %	
Current consumption	Typical 150 mA	
USB port	For firmware upgrades	
SD memory card slot	For backup, configuration and easy replacement	

Modbus TCP connector	2x RJ45	
Fieldbus/Ethernet connector	(See the secondary network interface details above)	
Galvanic isolation	On both BUS/Ethernet side	
Mechanical rating	IP20, NEMA rating 1	
Mounting	DIN-rail (EN 50022 standard) or Wall Mount (optional)	
Certifications	CE, $_C$UL$_{US}$, ATEX (zone 2), $_C$UL$_{US}$ Haz.Loc (class 1 div 2)	

File	Version	Size	Read online

Ordering information

Order Code	AB9004
Included components	Gateway Quick start documentation Connector terminals Power supply **not** included PLEASE NOTE: SD-card not included. Configuration software is available for download.
Accessories	021520: Wall mount option 021530: SD-memory card (industrial grade)

3 year guarantee. For purchasing instructions and terms and conditions, see: <u>How to buy</u>