

Anybus Communicator - Modbus RTU Server to EtherCAT SubDevice

Item number: ABC4026-A

The Anybus Communicator Modbus RTU Server to EtherCAT SubDevice enables you to connect any Modbus RTU control system to any EtherCAT control system. Anybus Communicators ensure reliable, secure, and high-speed data transfer between different industrial networks. Thanks to our intuitive web-based user interface, they're also incredibly easy to use.



A protocol converter that connects Modbus RTU and EtherCAT control systems

Features and benefits

✓ Transfer 1486 bytes to and from EtherCAT MainDevice (PLC)

Transfer up to 1486 bytes per direction (2972 bytes total) via dual 10/100 Mbit full-duplex RJ45 ports with integrated switch for daisy-chaining. EtherCAT slave according to IEC 61158 Type 12 (ETG.1000), 100 µs minimum cycle time, CANopen over EtherCAT, and includes an ESI file.

✓ Instant data transfer

The Communicator transfers data instantly between networks, with processing time so low you don't even need to count it, as it's in line with network jitter. Just add the cycle times of both networks to get the total transfer time.

✓ Diagnostics and support

The user interface shows connection status, allowing you to monitor the data going through the gateway. Monitor and control offline behavior via the Status Byte and Clear Data features. Our global support team is ready to help if needed.

✓ Secure and segment networks

Secure boot blocks malware, while a security switch locks configurations to prevent unauthorized changes. Network segmentation is inherent in the design, as each network is run separately, with only configured data transferred between networks.

✓ Transfer 1500 bytes to and from Modbus RTU controller (PLC)

Transfer up to 1500 bytes in each direction (3000 bytes total) via RS232/RS485 interfaces with baud rates up to 128,000 bit/s. Modbus RTU Server (slave) supporting Modbus diagnostics and device identification.

✓ Configure via web interface over Ethernet

With a graphical and responsive web interface, configuration is a breeze. In addition, there's no software to install and the dedicated Ethernet configuration port makes it easy to get started.

✓ Drop-in replacement

Already using an X-gateway? Don't worry, with legacy mode you can continue using the same device description file in your controller/PLC.

✓ Built for factory floors

The Gateway is made with industrial-grade components, verified to meet industry standards, and backed by a 5-year warranty. Its slim form factor, front-facing ports, and cable tie make DIN-rail installation easy.

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| General | |
|--|------------------------------------|
| Net Width (mm) | 27 |
| Net Height (mm) | 144 |
| Net Depth (mm) | 98 |
| Net Weight (g) | 150 |
| Packed Width (mm) | 35 |
| Packed Height (mm) | 170 |
| Packed Depth (mm) | 115 |
| Packed Weight (g) | 185 |
| Operating Temperature °C Min | -25 |
| Operating Temperature °C Max | 70 |
| Storage Temperature °C Min | -40 |
| Storage Temperature °C Max | 85 |
| Current Consumption Type Value at Vcc Nom (mA) | 90mA @ 24V DC (2.2W) |
| Current Consumption Max value at Vcc nom (mA) | 125mA @24V DC (3W) |
| Input Voltage (V) | 12-30V DC |
| Power Connector | 3-pin, 5.08 Phoenix plug connector |
| Reverse Polarity Protection | Yes |
| Short Circuit Protection | Yes |
| Isolation | Yes |

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General

| | |
|--------------------|------------------------------|
| Mounting | DIN-rail (EN 50022 standard) |
| Housing Materials | PC ABS, UL 94 VO |
| Packaging Material | Cardboard |

Identification and Status

| | |
|---|--------------|
| Product ID | ABC4026-A |
| Model Code | 40-SER-ETH-B |
| Predecessor | AB7692-F |
| Country of Origin | Sweden |
| HS Code | 8517620000 |
| Dual Usage | No |
| Export Control Classification Number (ECCN) | 5A991.b.1 |

Physical Features

| | |
|-----------------------------|--|
| Connectors / Input / Output | 1x 7-pin, 5.08 Phoenix plug connector; 2x RJ45; RJ45 Config port |
| Push Buttons | Factory reset |
| DIP & Rotary Switches | Security lock switch |
| Contains Battery | No |

EtherCAT Features

| | |
|----------------------------------|--|
| EtherCAT Mode | Slave / SubDevice |
| EtherCAT Supported Functionality | COE (Can Over EtherCAT); PDO, SDO; APRD, ARMW, APWR, BRD, BWR, FPRD, FPRW, FPWR, FRMW, LRD, LRW, LWR |
| EtherCAT Configuration File | ESI available |
| EtherCAT Bandwidth | 10/100 Mbit down to 100us cycle time |
| EtherCAT Input Data Size | 1486 bytes |

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EtherCAT Features

| | |
|---------------------------|------------|
| EtherCAT Output Data Size | 1486 bytes |
|---------------------------|------------|

Modbus-RTU Features

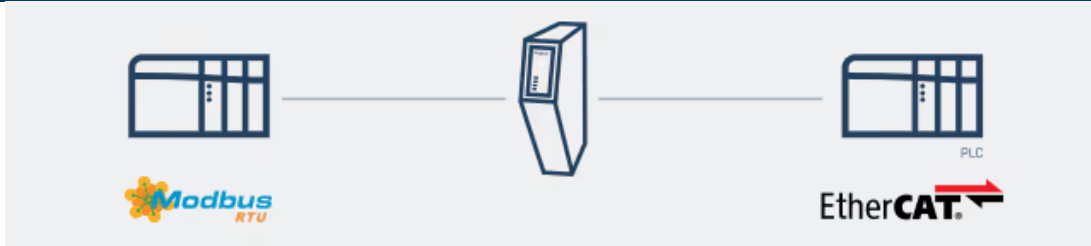
| | |
|------------------------------------|---|
| Modbus-RTU Mode | Slave mode |
| Modbus-RTU Supported Functionality | RS-232; RS-485; Endian conversion; 8 data bit; None, Odd, Even Parity; 1 or 2 stop bit; ABX compatible mode |
| Modbus-RTU Functions Supported | 1, 2, 3, 4, 5, 6, 8, 15, 16, 22, 23, 43/14 |
| Modbus-RTU Baud Rate | 1200,1800,2400,4800,7200,9600,14400,19200,35700,38400,57600,115200,128000 bit/s |
| Modbus-RTU Input Data Size | 1500 bytes |
| Modbus-RTU Output Data Size | 1500 bytes |

Certifications and Standards

| | |
|----------------------------|--|
| Protection Class IP | IP20 |
| RoHS Compliant | Yes |
| Recycle / Disposal | Yes |
| CE | Yes |
| FCC | No |
| UL | Yes |
| UL Information | E214107: Ord.Loc UL 61010-1, CSA C22.2 No. 61010-1, UL 61010-2-201, CSA C22.2 No. 61010-2-201 |
| KC | Yes |
| EMC | Yes |
| Environment | EN 55016-2-3 Class A, EN 55032 Class A, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6 |
| Waste Certification (WEEE) | Yes |



Use Case



The Anybus Communicator Modbus RTU Server to EtherCAT Subdevice enables you to connect any Modbus RTU control system to any EtherCAT control system.