

Anybus Communicator – Modbus TCP Client to Common Ethernet ATEX

Item number: ABC3290EX-A

The Anybus Communicator Modbus TCP Client to Common Ethernet ATEX enables you to connect any device or equipment to PROFINET, EtherCAT, and EtherNet/IP control systems. Anybus Communicators ensure reliable, secure, and high-speed data transfers. The intuitive user interface makes them incredibly easy to use.



A protocol converter that connects Modbus TCP devices to Industrial Ethernet control systems

Features and benefits

- ✓ **Connect up to 64 Modbus TCP Servers**
With support for up to 64 connections, 1500 bytes per Server, 152 transactions, minimum cycle time down to 10 ms a wide range of applications can be handled with ease.
- ✓ **Selectable Industrial Ethernet network**
Cover multiple protocols with a single Communicator. Supports EtherNet/IP, EtherCAT, Modbus TCP, and PROFINET. Download firmware for your desired protocols from the product webpage and upload it via the Communicator's interface.
- ✓ **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.
- ✓ **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.
- ✓ **Transfer up to 1500 bytes to and from the controller (PLC)**
Transfer up to 1500 bytes (network dependent) in each direction (3000 bytes total) via dual 10/100 Mbit full duplex RJ45 ports with an integrated switch for daisy-chaining.
- ✓ **EX certified**
Certified for ATEX Zone 2 and UL Hazardous Location Class 1 Division 2 for use in areas where explosive gas may exist.
- ✓ **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.
- ✓ **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.

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| General | |
|------------------------------------------------|------------------------------------------------------------------------|
| Net Weight (g) | 150 |
| Packed Width (mm) | 35 |
| Packed Height (mm) | 170 |
| Packed Depth (mm) | 115 |
| Packed Weight (g) | 151 |
| 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 |
| Content of Delivery | Gateway, power connector, start-up guide, compliance information sheet |
| Mounting | DIN-rail (EN 50022 standard) |
| Housing Materials | PC ABS, UL 94 VO |

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General

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|--------------------|-----------|
| Packaging Material | Cardboard |
| Warranty (years) | 5 |

Identification and Status

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|---------------------------------------------|-------------------------------------------------------------------------------------------------------|
| Product ID | ABC3290EX-A |
| Model Code | 40-ETH-ETH-B-EX |
| Predecessor | AB9000-B, AB9000-B-5PACK, AB9006-B, AB9006-B-5PACK, AB9007-B, AB9007-B-5PACK, A9008-B, AB9008-B-5PACK |
| Country of Origin | Sweden |
| HS Code | 8517620000 |
| Dual Usage | No |
| Export Control Classification Number (ECCN) | 5A991.b.1 |

Physical Features

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|-----------------------------|----------------------------------------|
| Connectors / Input / Output | 2xRJ45;2x RJ45;2xRJ45;RJ45 Config port |
| Push Buttons | Factory reset |
| DIP & Rotary Switches | Security lock switch |
| Contains Battery | No |

EtherCAT Features

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

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EtherNet/IP Features

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|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| EtherNet/IP Mode | Adapter / Slave |
| EtherNet/IP Supported Functionality | Endian conversion (byte swap); QoS; Ethernet/IP Class 1 and 3; Quick Connect Class B; DLR (beacon mode); Daisy Chainging; CT19 ODVA Conformance |
| EtherNet/IP Configuration File | EDS available |
| EtherNet/IP Bandwidth | 10/100 MBit down to 1ms cycle time |
| EtherNet/IP Input Data Size | 1448 bytes |
| EtherNet/IP Output Data Size | 1448 bytes |

Modbus-TCP Features

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|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Modbus-TCP Mode | Master / Client;Slave / Server |
| Modbus-TCP Supported Functionality | Modbus specification V1.1B; Endian Conversion (Byte swap); LiveList; DataExchangeControl;Modbus specification V1.1b3; 4 connections; Daisy chaining |
| Modbus-TCP No. Of Servers | 152 transactions / 64 connections |
| Modbus-TCP Functions Supported | 1, 2, 3, 4, 5, 6, 15, 16, 23, 43/14 |
| Modbus-TCP Bandwidth | 10/100 Mbit/s down to 10ms cycle time;10/100 Mbit |
| Modbus-TCP Input Data Size | 1500 bytes |
| Modbus-TCP Output Data Size | 1500 bytes |

PROFINET Features

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|-----------------------------------------|--------------------------------------|
| PROFINET Mode | Slave |
| PROFINET Supported Functionality | RT; Daisy chaining; |
| PROFINET Conformance Class | Class B |
| PROFINET Configuration File | GSDML available |
| PROFINET Bandwidth | 10/100 Mbit/s down to 1ms cycle time |
| PROFINET Input Data Size | 1024 bytes |

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PROFINET Features

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|----------------------------------|------------|
| PROFINET Output Data Size | 1024 bytes |
|----------------------------------|------------|

Certifications and Standards

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|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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; E203225: Haz.Loc CL I DIV2 GP A,B,C,D T4, UL 121201, CAN/CSA C22.2 NO. 213-17 |
| ATEX | Yes |
| ATEX Information | II 3 G Ex ec IIC T4 Gc, EN IEC 60079-0, 60079-7, IEC 60664-1 |
| 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 |