Anybus Communicator - Modbus RTU Server to Common Ethernet ATEX

Item number: ABC4092EX-A

The Anybus Communicator Modbus RTU Server to Common Ethernet enables you to connect any Modbus RTU control system to any EtherNet/IP, EtherCAT, Modbus TCP, or PROFINET control system. Anybus Communicators ensure reliable, secure, high-speed data transfers 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 to other Industrial Ethernet control systems

Features and benefits

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.

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.

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.

EX certified

Certified for ATEX Zone 2 and UL Hazardous Location Class 1 Division 2 for use in areas where explosive gas may exist.

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.

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.

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.

Drop-in replacement

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

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.

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

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
Packaging Material	Cardboard
Warranty (years)	5

Identification and Status

Product ID	ABC4092EX-A
Model Code	40-SER-ETH-B-EX
Predecessor	AB7839-F; AB7659-F; AB7641-F; AB7692-F
Country of Origin	Sweden
HS Code	8517620000
Dual Usage	No
Export Control Classification Number (ECCN) (Applies only to the U.S)	5A991.b.1

Physical Features

Connectors / Input / Output	2xRJ45;2x RJ45;1x 7-pin, 5.08 Phoenix plug connector;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

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EtherCAT Features

EtherCAT Bandwidth	10/100 Mbit down to 100us cycle time
EtherCAT Input Data Size	1486 bytes
EtherCAT Output Data Size	1486 bytes

EtherNet/IP Features

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-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

Modbus-TCP Features

Modbus-TCP Mode	Slave / Server
Modbus-TCP Supported Functionality	Modbus specification V1.1b3; 4 connections; Daisy chaining
Modbus-TCP Functions Supported	1, 2, 3, 4, 5, 6, 15, 16, 23, 43/14
Modbus-TCP Bandwidth	10/100 Mbit

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Modbus-TCP Features

Modbus-TCP Input Data Size	1500 bytes
Modbus-TCP Output Data Size	1500 bytes

PROFINET Features

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
PROFINET Output Data Size	1024 bytes

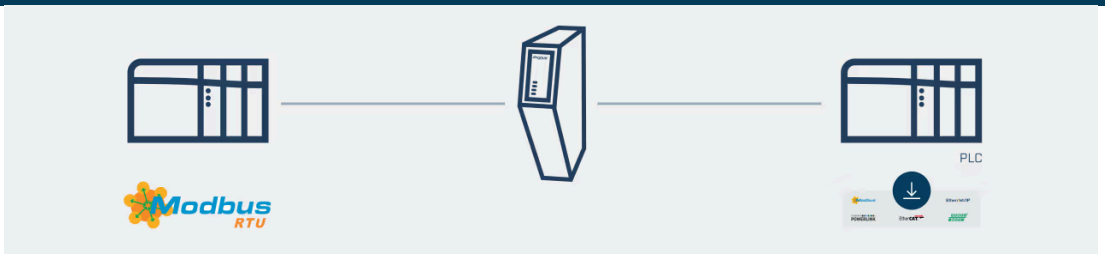
Certifications and Standards

Protection Class IP	IP20
RoHS Compliant	Yes
Recycle / Disposal	Yes
Product Certifications	CE, UL, ATEX , KC, WEEE, EMC
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 Information	II 3 G Ex ec IIC T4 Gc, EN IEC 60079-0, 60079-7, IEC 60664-1
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

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Use Case



The Anybus Communicator Modbus RTU Server to PROFIBUS DP device enables you to connect any Modbus RTU control system to any PROFBUS DP control system.