Anybus Communicator – Serial Master to Common Ethernet ATEX

Item number: ABC3090EX-A

The Anybus Communicator Serial Master to Common Ethernet ATEX enables you to connect any RS-232/485 device or equipment to PROFINET, EtherCAT, EtherNet/IP, and Modbus TCP 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 serial devices to Industrial Ethernet control systems

Features and benefits

Easily convert proprietary RS-232/485 protocols

Convert RS-232/485 Request/Response or Produce/Consume protocol in just a few minutes. Use the drag-and-drop frame builder to build frames, insert/extract data, and handle complex variable frames.

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.

Drop-in replacement

Already using a Communicator Classic? Don’t worry, with legacy mode you can import your current serial configuration and continue using the same configuration 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

Connect up to 32 Modbus RTU Servers (slaves)

Easily handles demanding applications thanks to support for up to 32 servers, 150 Modbus commands, a selectable 3 ms serial update rate, a graphical transaction builder, controller/PLC triggers and inter-node data exchange.

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 analyze serial traffic and monitor data going through the gateway. Monitor and control nodes via the Live List and Data Exchange Control 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.

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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 Max	70
Storage Temperature °C Min	-40
Storage Temperature °C Max	85
Power Connector	3-pin, 5.08 Phoenix plug connector
Reverse Polarity Protection	Yes
Short Circuit Protection	Yes
Isolation	TRUE
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

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General

Warranty (years)	5

Identification and Status

Product ID	ABC3090EX-A
Model Code	40-SER-ETH-B-EX
Predecessor	AB7072-B, AB7072-B-5PACK, AB7007-C, AB7007-C-5PACK, AB7013-C, AB7013-C-5PACK, AB7028-C, AB7028-C-5PACK, AB7061-C, AB7061-C-5PACK
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

Push Buttons	Factory reset
Contains Battery	No

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 Bandwidth	10/100MBit down to 1ms cycle time
EtherNet/IP Input Data Size	1448 bytes
EtherNet/IP Output Data Size	1448 bytes

Modbus-TCP Features

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/s

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Modbus-TCP Features

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

PROFIBUS Features

PROFIBUS Baud Rate	9600 bit/s - 12 Mbit/s
PROFIBUS Input Data Size	244 bytes
PROFIBUS Output Data Size	244 bytes

PROFINET Features

PROFINET Bandwidth	10/100MBit down to 1ms cycle time
PROFINET Input Data Size	1024 bytes
PROFINET Output Data Size	1024 bytes

Certifications and Standards

Protection Class IP	IP20
Product Certifications	CE, UL, ATEX , EMC
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 61000-4-10
WEEE Category	IT and telecommunications equipment