Anybus Communicator - Modbus RTU Server to PROFIBUS IO-device Device ATEX

Item number: ABC4028EX-A

The Anybus Communicator Modbus RTU Server to PROFIBUS IO device enables you to connect any Modbus RTU control system to any PROFBUS IO 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 and PROFIBUS control systems

Features and benefits

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.

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 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.

Transfer 244 bytes to and from PROFIBUS controller (PLC)

Transfer up to 244 bytes in each direction (488 bytes total). PROFIBUS DP device (slave) with automatic baud rate detection. Address setting via rotary switches or web interface. Includes a GSD 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.

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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
Isolation	Yes
Mounting	DIN-rail (EN 50022 standard)
Housing Materials	PC ABS, UL 94 VO

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General

Packaging Material	Cardboard

Identification and Status

Product ID	ABC4028EX-A
Model Code	40-SER-PDP-A-EX
Predecessor	AB7850-F
Country of Origin	Sweden
HS Code	8517620000
Export Control Classification Number (ECCN)	5A991.b.1

Physical Features

Connectors / Input / Output	1x 7-pin, 5.08 Phoenix plug connector;1x D-sub 9-pin female PROFIBUS connector;RJ45 Config port
Push Buttons	Factory reset
DIP & Rotary Switches	Security lock switch

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

PROFIBUS Features

PROFIBUS Mode	DP Device
PROFIBUS Supported Functionality	PROFIBUS-DP Slave functionality according to extensions of EN 50170
PROFIBUS Device Address	0-125

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PROFIBUS Features

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

Certifications and Standards

Protection Class IP	IP20
Recycle / Disposal	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 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 IO-device enables you to connect any Modbus RTU control system to any PROFBUS IO control system.