

Anybus Communicator – Ethernet to PROFIBUS DP Device ATEX

Item number: ABC4091EX-A

The Anybus Communicator Ethernet to PROFIBUS DP device ATEX enables you to connect any Ethernet control system to any PROFIBUS DP 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 Ethernet and PROFIBUS DP 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 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.
- ✓ **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 1-year warranty. Its slim form factor, front-facing ports, and cable tie make DIN-rail installation easy.

Anybus Communicator – Ethernet to PROFIBUS DP Device ATEX



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
Mounting	DIN-rail (EN 50022 standard)
Housing Materials	PC ABS, UL 94 VO
Packaging Material	Cardboard
Warranty (years)	1

Anybus Communicator – Ethernet to PROFIBUS DP Device ATEX



Identification and Status

Product ID	ABC4091EX-A
Model Code	40-SER-PDP-A-EX
Predecessor	AB7632-F, AB7682-F, AB7649-F, AB7901-F, AB7650-F, AB7684-F
Country of Origin	Sweden
HS Code	8517620000
Dual Usage	No
Export Control Classification Number (ECCN)	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
Modbus-TCP Input Data Size	1500 bytes

Anybus Communicator – Ethernet to PROFIBUS DP Device ATEX



Modbus-TCP Features

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

PROFIBUS Features

PROFIBUS Mode	DP Device
---------------	-----------

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
---------------------	------

CE	Yes
----	-----

UL	Yes
----	-----

ATEX	Yes
------	-----

ATEX Information	II 3 G Ex ec IIC T4 Gc, EN IEC 60079-0, 60079-7, IEC 60664-1
------------------	--

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 61000-4-9
-------------	--

WEEE Category	IT and telecommunications equipment
---------------	-------------------------------------



Use Case



The communicator can be used wherever there is a need to transfer data between control systems using different industrial protocols.