

## 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 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 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)             | 5                                  |

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## 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                                                 |

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## 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.