

## Anybus Communicator – PROFINET IO Device to EtherCAT slave

Item number: ABC4020-A

The Anybus Communicator PROFINET IO Device to EtherCAT slave enables you to connect any PROFINET IO control system to any EtherCAT control system. Anybus Communicators ensure reliable, secure, high-speed data transfers between different industrial networks. They include built-in cybersecurity features and are compliant with the Cyber Resilience Act (CRA). Thanks to our intuitive web-based user interface, they're also incredibly easy to use.



*A protocol converter that connects PROFINET IO and EtherCAT control systems*

## Features and benefits

- ✓ **Transfer 1486 bytes to and from EtherCAT MainDevice (PLC)**  
Transfer up to 1486 bytes per direction (2972 bytes total) via dual 10/100 Mbit full-duplex RJ45 ports with integrated switch for daisy-chaining. EtherCAT slave according to IEC 61158 Type 12 (ETG.1000), 100 µs minimum cycle time, CANopen over EtherCAT, and includes an ESI 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.
- ✓ **Cyber Resilience Act (CRA)-ready**  
Developed under an IEC 62443-4-1 certified process, with HTTPS configuration, role-based access control, and a physical security switch to help meet CRA requirements.
- ✓ **Transfer 1024 bytes to and from PROFINET controller (PLC)**  
Transfer up to 1024 bytes in each direction (2048 total) via dual 10/100 Mbit full duplex RJ45 ports with an integrated switch for daisy-chaining. PROFINET IO-Device, 1 ms minimum cycle time, Conformance Class B, Netload Class III, and includes a GSD file.
- ✓ **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 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 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                                      | TRUE                               |

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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        | ABC4020-A    |
| Model Code        | 40-ETH-ETH-B |
| Predecessor       | AB7684-F     |
| Country of Origin | Sweden       |
| HS Code           | 8517620000   |
| Dual Usage        | No           |

## Physical Features

|                             |                                   |
|-----------------------------|-----------------------------------|
| Connectors / Input / Output | 2x RJ45, 2xRJ45, RJ45 Config port |
| Push Buttons                | Factory reset                     |
| 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                                                                                        |
| EtherCAT Bandwidth               | 10/100 Mbit down to 100us cycle time                                                                 |
| EtherCAT Input Data Size         | 1486 bytes                                                                                           |

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## EtherCAT Features

|                           |            |
|---------------------------|------------|
| EtherCAT Output Data Size | 1486 bytes |
|---------------------------|------------|

## PROFINET Features

|               |       |
|---------------|-------|
| PROFINET Mode | Slave |
|---------------|-------|

|                                  |                     |
|----------------------------------|---------------------|
| PROFINET Supported Functionality | RT; Daisy chaining; |
|----------------------------------|---------------------|

|                            |         |
|----------------------------|---------|
| PROFINET Conformance Class | Class B |
|----------------------------|---------|

|                             |                 |
|-----------------------------|-----------------|
| PROFINET Configuration File | GSDML available |
|-----------------------------|-----------------|

|                    |                                   |
|--------------------|-----------------------------------|
| PROFINET Bandwidth | 10/100MBit 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, KC, WEEE, EMC |
|------------------------|-----------------------|

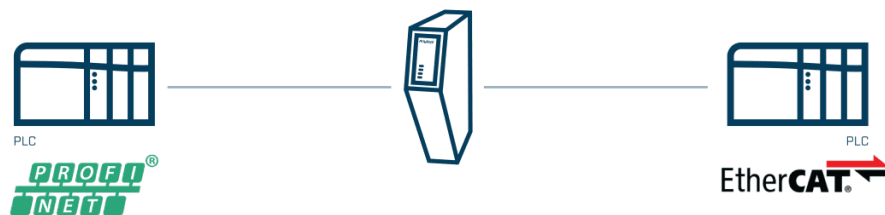
|                |                                                                                               |
|----------------|-----------------------------------------------------------------------------------------------|
| UL Information | E214107: Ord.Loc UL 61010-1, CSA C22.2 No. 61010-1, UL 61010-2-201, CSA C22.2 No. 61010-2-201 |
|----------------|-----------------------------------------------------------------------------------------------|

|             |                                                                                                              |
|-------------|--------------------------------------------------------------------------------------------------------------|
| 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 |
|-------------|--------------------------------------------------------------------------------------------------------------|

|               |                                     |
|---------------|-------------------------------------|
| 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.