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
Export Control Classification Number (ECCN) (Applies only to the U.S)	5A991.b.1

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

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EtherCAT Features

EtherCAT Input Data Size	1486 bytes
EtherCAT Output Data Size	1486 bytes

PROFINET Features

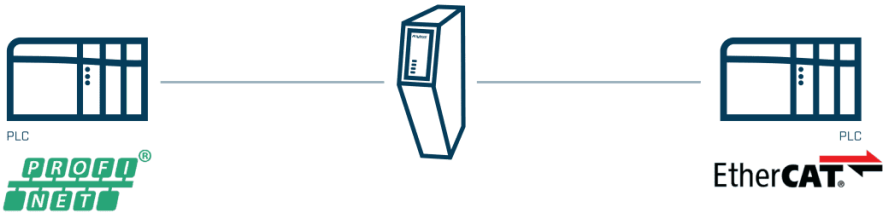
PROFINET Mode	Slave
PROFINET Supported Functionality	RT; Daisy chaining;
PROFINET Conformance Class	Class B
PROFINET Configuration File	GSDML available
PROFINET Bandwidth	10/100MBit down to 1ms cycle time
PROFINET Input Data Size	1024 bytes
PROFINET Output Data Size	1024 bytes

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.