Anybus Communicator – Modbus-TCP server to EtherCAT slave

Item number: ABC4016-A

The Anybus Communicator Modbus-TCP server to EtherCAT slave enables you to connect any Modbus-TCP control system to any EtherCAT 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 Modbuc-TCP and EtherCAT control systems

Features and benefits

Intuitive user interface

Use the intuitive web-based user interface to easily configure the Communicator via the drag-and-drop functionality or to analyze live data, export log files, and generate support packages.

High performance

Powered by the award-winning NP40 network processor and high-end components, the Communicator meets the constantly growing demand for more data to be transferred faster.

Instant data transfer

Instant data transfer lets you take advantage of high-speed industrial networks, as the Communicator provides hardware-accelerated endian conversion (byte swap), saving processing time on the PLC.

Ensures uptime

Thanks to carefully selected industrial components the Communicator operates reliably in harsh industrial environments ensuring uptime and a long life.

Brand Labeling

Pre-configure the Communicator and customize the hardware and user interface with your colors and logos.

Cybersecurity

The secure boot protects against malware, while a security switch locks configurations to prevent unauthorized changes. Ports used in production are disabled to add another layer of security.

Optimized hardware design

The Communicator has forward-facing ports and is designed for IP20 and DIN-rail mounting, enabling you to install it with ease, close to connected devices, thereby reducing wiring requirements.

5-year warranty

The Communicator is made to be durable and have a long life. We’re so confident in its quality that we provide a 5-year warranty.

Instant diagnostics

The user interface displays real-time connection status and I/O data mapping for easy troubleshooting. Easily generate a support file containing all the necessary information.

Life cycle management

HMS maintains every part of the Communicator, including network updates, throughout the product’s lifecycle.

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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

Mounting	DIN-rail (EN 50022 standard)
Housing Materials	PC ABS, UL 94 VO
Packaging Material	Cardboard
Warranty (years)	5

Identification and Status

Product ID	ABC4016-A
Model Code	40-ETH-ETH-B
Predecessor	AB7901-F
Country of Origin	Sweden
HS Code	8517620000
Dual Usage	No
Export Control Classification Number (ECCN)	5A991.b.1

Physical Features

Connectors / Input / Output	2xRJ45, 2xRJ45, RJ45 Config port
Push Buttons	Factory reset
DIP & Rotary Switches	Security lock switch
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

Modbus-TCP Features

Modbus-TCP Mode	Slave / Server
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
Modbus-TCP Output Data Size	1500 bytes

Certifications and Standards

Protection Class IP	IP20
RoHS Compliant	Yes
Recycle / Disposal	TRUE
CE	Yes
FCC	No
UL	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
ATEX	No
KC	Yes
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 61000-4-6

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Certifications and Standards

Waste Certification (WEEE)	Yes
WEEE Category	IT and telecommunications equipment

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Use Case

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