Anybus Communicator – Serial Master to Common Ethernet

Item number: ABC3090-A

The Anybus Communicator Serial Master to Common Ethernet enables you to connect any RS-232/485 device or equipment to PROFINET, EtherCAT, EtherNet/IP, and Modbus TCP control systems. Anybus Communicators ensure reliable, secure, and high-speed data transfers. The intuitive user interface makes them incredibly easy to use.

A protocol converter that connects serial devices to Industrial Ethernet 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.

Convert standard and proprietary serial protocols

Convert standard serial protocols such as Modbus RTU and proprietary serial request/response or produce/consume-based protocols.

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

Thanks to carefully selected industrial components the Communicator operates reliably in harsh environments, ensuring uptime and longevity. Our confidence in quality is reflected in 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
Isolation	TRUE
Mounting	DIN-rail (EN 50022 standard)
Housing Materials	PC ABS, UL 94 VO

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General

Packaging Material	Cardboard
Warranty (years)	5

Identification and Status

Product ID	ABC3090-A
Model Code	40-SER-ETH-B
Country of Origin	Sweden
HS Code	8517620000
Export Control Classification Number (ECCN)	5A991.b.1

Physical Features

Connectors / Input / Output	1x 7-pin, 5.08 Phoenix plug connector, 2xRJ45, 2xRJ45, 2xRJ45, 2x RJ45, RJ45 Config port
Push Buttons	Factory reset

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
EtherCAT Output Data Size	1486 bytes

EtherNet/IP Features

EtherNet/IP Mode	Adapter / Slave
EtherNet/IP Supported Functionality	Endian conversion (byte swap); QoS; Ethernet/IP Class 1 and 3; Quick Connect Class B; DLR (beacon mode); Daisy Chainging; CT19 ODVA Conformance
EtherNet/IP Configuration File	EDS available
EtherNet/IP Bandwidth	10/100MBit down to 1ms cycle time

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EtherNet/IP Features

EtherNet/IP Input Data Size	1448 bytes
EtherNet/IP Output Data Size	1448 bytes

Modbus-RTU Features

Modbus-RTU Mode	Client / Master
Modbus-RTU Supported Functionality	RS-232; RS485; Standard Modbus RTU Master; Custom Request / Responce commands; Custom Produce / Consume transactions; Trigger initated transactions; 7 or 8 data bit; None, Odd, Even Parity; 1 or 2 stop bit; Clear/Freeze
Modbus-RTU Functions Supported	1, 2, 3, 4, 5, 6, 7, 8, 11, 12, 15, 16, 17, 20, 21, 22, 24
Modbus-RTU Baud Rate	1200,1800,2400,4800,7200,9600,14400,19200,35700,38400,57600,115200,128000 bit/s
Modbus-RTU Input Data Size	1500 bytes
Modbus-RTU Output Data Size	1500 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

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

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PROFINET Features

PROFINET Input Data Size	1024 bytes
PROFINET Output Data Size	1024 bytes

Serial Features

Max Stations	31
Connector	1x 7-pin, 5.08 Phoenix plug connector
Max Nodes	31
Baud Rate	1200,1800,2400,4800,7200,9600,14400,19200,35700,38400,57600,115200,128000 bit/s
Supported Functionality	RS-232; RS485; Standard Modbus RTU Master; Custom Request / Responce commands; Custom Produce / Consume transactions; Trigger initated transactions; 7 or 8 data bit; None, Odd, Even Parity; 1 or 2 stop bit; Clear/Freeze

Certifications and Standards

Protection Class IP	IP20
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