Anybus®
BY HMS NETWORKS

Anybus Communicator – Serial Master to PROFIBUS IO-Device

Item number: ABC3000-A

The Anybus Communicator Serial Master to PROFIBUS IO-Device enables you to connect any RS-232/485 device or equipment to PROFIBUS control systems. Anybus Communicators ensure reliable, secure, and 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 serial devices to PROFIBUS 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.

HMS

Anybus Communicator – Serial Master to PROFIBUS IO-Device

General

Net Width (mm)	27
Net Height (mm)	144
Net Depth (mm)	98
Net Weight (g)	150
Packed Width (mm)	15
Packed Height (mm)	6
Packed Depth (mm)	17
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

Anybus Communicator – Serial Master to PROFIBUS IO-Device

General

Packaging Material	Cardboard
Warranty (years)	5

Identification and Status

Product ID	ABC3000-A
Model Code	40-SER-PDP-A
Predecessor	AB7000-C, AB7000-C-5PACK
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, 1x D-sub 9-pin female PROFIBUS connector, RJ45 Config port
Push Buttons	Factory reset

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

PROFIBUS Features

PROFIBUS Mode	DP Device
PROFIBUS Supported Functionality	PROFIBUS-DP Slave functionality according to extensions of EN 50170
PROFIBUS Device Address	0-125

Anybus Communicator – Serial Master to PROFIBUS IO-Device

PROFIBUS Features

PROFIBUS Configuration File	GSD available
PROFIBUS Baud Rate	9600 bit/s - 12 Mbit/s
PROFIBUS Input Data Size	244 bytes
PROFIBUS Output Data Size	244 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