

Anybus Communicator – Serial Master to CANopen

Item number: AB7003-B

The Anybus Communicator – Serial Master to CANopen converts serial protocols to CANopen, enabling you to connect any RS-232/485 device or equipment to CANopen control systems. Anybus Communicators ensure reliable, secure, high-speed data transfers between different industrial networks while being easy to use.



A protocol converter that connects serial devices to CANopen control systems.

Features and benefits

✓ No hardware or software changes needed

Pre-defined for Modbus RTU. Avoid the hassle of scripting and building serial Modbus frames with the 6-step Modbus RTU wizard.

✓ Compatible

Convert any standard serial protocol such as Modbus RTU, DF1, or any other Request/Response or Produce/Consume proprietary protocol, in just a few minutes.

✓ 3-year warranty

The Communicator is designed to be robust and long-lasting. A 3-year guarantee is provided.

✓ Convert standard and proprietary serial protocols

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

✓ Daisy chaining

Versions with Dual Port switched Ethernet allow for daisy chaining and eliminate the need for external switches.

✓ Life cycle management

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

✓ Hassle-free Connection to Modbus RTU

Pre-defined for Modbus RTU. Avoid the hassle of scripting and building serial Modbus frames with the 6-step Modbus RTU wizard.

✓ Slim hardware design

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

✓ Increased PLC Performance

The Communicator performs an intelligent protocol conversion and presents the serial data to the PLC control system as easily processed I/O data.

✓ Save & Load

The Save/Load function enables a completed configuration to be re-used for other installations.

✓ Trusted partner

Anybus has a long history of working with all the major network organizations to ensure compliant, high-performing, and compatible products.



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General

Net Width (mm)	27
Net Height (mm)	120
Net Depth (mm)	75
Net Weight (g)	300
Packed Width (mm)	15
Packed Height (mm)	6
Packed Depth (mm)	17
Packed Weight (g)	300
Operating Temperature °C Min	0
Operating Temperature °C Max	55
Storage Temperature °C Min	-40
Storage Temperature °C Max	85
Relative Humidity	0-95% non condensing
Current Consumption Type Value at Vcc Nom (mA)	100mA @ 24V DC
Current Consumption Max value at Vcc nom (mA)	300mA @ 24V DC
Input Voltage (V)	24V DC (-10% to +10%)
Power Connector	2-pin, 5.08 Phoenix plug connector
Reverse Polarity Protection	Yes
Short Circuit Protection	Yes



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General

Isolation	TRUE
Maximum Installation Altitude (m)	up to 2 000 m
Mounting	DIN-rail (EN 50022 standard)
Housing Materials	PC ABS, UL 94
Packaging Material	Cardboard

Identification and Status

Product ID	AB7003-B
Country of Origin	Sweden
HS Code	8517620000
Dual Usage	No
Export Control Classification Number (ECCN)	5A991.b.4b

Physical Features

Connectors / Input / Output	1x D-sub 9-pin female, 1x D-sub 9-pin male
DIP & Rotary Switches	3x Rotary CAN Address + Baudrate
Contains Battery	No

CANopen Features

CANopen Mode	Slave mode
CANopen Baud Rate	10 kbit/s - 1000 kbit/s
CANopen Supported Functionality	PDO, SDO;DS301 v4.02
CANopen Configuration File	EDS available
CANopen Input Data Size	512 bytes
CANopen Output Data Size	512 bytes



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Modbus-RTU Features

Modbus-RTU Mode	Client / Master
Modbus-RTU Supported Functionality	RS-232; RS-422; RS485; DF1; Standard Modbus RTU Master; Custom Request / Response commands; Custom Produce / Consume transactions; Trigger initiated 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 bit/s
Modbus-RTU Input Data Size	512 bytes
Modbus-RTU Output Data Size	512 bytes

Serial Features

Connector	1x D-sub 9-pin female
Max Nodes	31
Baud Rate	1200,1800,2400,4800,7200,9600,14400,19200,35700,38400,57600 bit/s
Supported Functionality	RS-232; RS-422; RS485; DF1; Standard Modbus RTU Master; Custom Request / Response commands; Custom Produce / Consume transactions; Trigger initiated transactions 7 or 8 data bit; None, Odd, Even Parity; 1 or 2 stop bit; Clear/Freeze

Certifications and Standards

Protection Class IP	IP20
RoHS Compliant	Yes
Recycle / Disposal	TRUE
CE	Yes
FCC	No
UL	Yes
UL Information	E214107: Ord.Loc UL508, CSA C22.2 No. 14-10; E203225: Haz.Loc CL I DIV2 GP A,B,C,D, ANSI/ISA 12.12.01, CSA C22.2 No. 213
EMC	Yes
Environment	EN 50082-2, EN 55011, EN 61000-6-2, 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