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)	150
Packed Width (mm)	135
Packed Height (mm)	55
Packed Depth (mm)	170
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) (Applies only to the U.S)	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 / 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 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 / 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
RoHS Compliant	Yes
Recycle / Disposal	TRUE
Product Certifications	CE, UL, WEEE
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
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
WEEE Category	IT and telecommunications equipment