

Anybus Communicator - Modbus TCP

Order Code: ABC3028

Modbus RTU Master - Modbus TCP server

Integrate your Modbus RTU based industrial devices and equipment to Modbus TCP control systems without any changes to the device. Just connect, configure and you're done.

The Anybus Communicator can transfer large amounts of data, is fast to configure thanks to its' drag and drop web interface and is built on trusted Anybus technology.



FEATURES & BENEFITS

- Web-based drag and drop configuration interface
- Transfer up to 1 500 bytes of data in both directions (requires large forward open)
- -25 to +70 °C industrial temperature range
- Powered by award winning NP40 network processor

Drag and drop web interface

To make sure you spend as little time as possible to configure the Communicator, we have built a graphical and responsive web-based user interface. No software need to be install, just open your favorite web browser and get started.

Transfer up to 1 500 bytes of data

Demand for more data is constantly growing and the Communicator has been equipped to handle the challenge. It can transfer 1 500 bytes from the PLC to the Gateway and 1 500 bytes from the gateway to the PLC, 3 000 bytes in total (requires large forward open). Support for up to 150 Modbus commands means even complex configurations with multiple nodes can be handled with ease.

Industrial temperature range

An industrial operating temperature range of -25 to +70 $^{\circ}\text{C}$ ensure the Communicator can excel under harsh conditions.

Powered by proven NP40 technology

The Communicator is built on the award-winning and proven Anybus NP40 network processor. With hundreds of thousands NP40:s used in Embedded applications across the world, it is the industry benchmark for reliable industrial communication.

Security switch

Even with sophisticated security measures, human error is still the main cause of security breaches. To simplify security, we added a physical security switch on the Communicator. It locks your configuration and prevent any access to the web-based configuration interface. Just flip it when your configuration is done and watch the padlock LED on the product light up.

Security chip and secure boot

To meet current and future security challenges, the Communicator is equipped with the latest Anybus security chip. Secure boot ensures the firmware has not been tampered with.

Ethernet configuration port

With a dedicated Ethernet configuration port you don't need any special configuration cable. In addition, it is easy to connect to the gateway to monitor network traffic.

Optimized for DIN-rail mounting

The slim form factor, front facing network connectors, screw in serial cable connector and the neat cable tie ensure it is fast and simple to install and connect the Communicator.

Diagnostics

When you open the Communicator web interface you immediately see the status of the Modbus/TCP connection and serial connection. You can even see the status of individual serial nodes. It's also equipped with a serial log and an event log for further analysis.

Support

Sometimes you run into a problem where you need help. That's why we have included a support page in the user interface with contact information. There is even a button to generate a support package to simplify troubleshooting.

SERIAL FEATURES

- Selectable RS-232/485 interface
- 3 ms serial update rate (selectable)
- Visual I/O data map to map serial data to industrial network
- Drag and drop frame builder for custom protocols, no programming required
- Trigger serial transactions from control system with triggers
- Transfer data between serial nodes with general data area
- Monitor and control serial nodes from control system with live list and data exchange control

Ability to import Communicator Classic configuration file

MODBUS TCP FEATURES

- Modbus TCP server
- \bullet Transfer up to 1 500 bytes to and from Modbus TCP (3 000 bytes total)
- 4 connections
- Function codes 01-06, 15-16, 23, 43/14
- Dual RJ45 Ethernet ports with 10/100 Mbit full duplex
- Daisy chaining with integrated switch

TECHNICAL SPECIFICATIONS

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GENERAL

Dimensions (L x W x H) with serial and power connector	144 x 27 x 98 mm 5,67 x 1.06 x 3.85 in
Weight	150 grams, 0.33 lb
Buttons and switches	Reset button and security switch
LEDs	Gateway, Serial and EtherNet/IP status
IP rating	IP20
Housing material	PC ABS, UL 94 VO
Mounting	DIN rail (35 * 7,5/15)

ENVIRONMENT

Operating temperature	-25 to 70° C, -13 to 158° F
Storage temperature	-40 to 85° C, -40 to 185° F
Relative humidity	0-95% non condensing
Installation altitude	Up to 2 000 m

POWER

Input voltage	12 - 30 VDC
Current consumption	Typical: 160 mA @ 24V Max: 400 mA @ 12V
Power connector	3-pole Phoenix plug
Protection	Reverse voltage protection and short circuit protection

SERIAL RS232/485 PORT

Ports	1 x RS232/RS485
Baud rate	1200 bps to 128 kbps
Max stations	31
Isolation	Galvanic isolation
Connector	7-pole Phoenix connector
Max nodes	31

MODBUS RTU

Modes	Master
Functions supported	1, 2,3, 4, 5, 6, 15, 16, 22, 23
Max number of commands	150
Input data size	1 500 bytes
Output data size.	1 500 bytes

MODBUS TCP

Modes	Server
Max number of connections	4
Input data size	1 500 bytes
Output data size.	1 500 bytes

THERNET PORTS

Ports	2 x Ethernet			
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Isolation	Galvanic isolation
Bitrate	10/100 Mbit full duplex
Connector	RJ45
Switch.	Dual port cut-through switch

CERTIFICATIONS AND STANDARDS

UL	C ^{UL} US
CE	2014/30/EU
EMC	EN 61000-6-2 EN 61000-4-2 EN 61000-4-3 EN 61000-4-4 EN 61000-4-5 EN 61000-4-6 EN 61000-6-4 EN 55032
Environment	IEC 60068-2-1 Ab IEC 60068-2-2 Bb IEC 60068-2-1 Ab IEC 60068-2-1 Ab IEC 60068-2-2 Bb IEC 60068-2-14 Nb IEC 60068-2-30 Db IEC 60068-2-78 Cab IEC 60068-2-78 Cab
Vibration and shock	IEC 60068-2-27 IEC 60068-2-6
Waste certification	WEE

CONFIGURATION

Configuration software	Web based configuration
Configuration ports	Dedicated 10/100 Mbit RJ45 Ethernet configuration port and EtherNet/IP ports

SECURITY

Secure boot	Ensures software authenticity
Security switch	Physical switch that enable/disable access to the web based configuration interface

PRODUCT PACKAGING

Content	Gateway, power connector, serial connector, start-up guide, compliance information sheet	
Box material	Cardboard	





Ordering Information

ORDER CODE: ABC3028
WARRANTY: 3 years
What's included:

- Product

- Serial connector

- Power connector

- Installation guide

- Compliance sheet

For purchasing instructions and terms and conditions, see: <u>How to buy</u>

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