

# 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 °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 nware 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
- 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<br>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                                      |
| lousing 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<br>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 |

# **ETHERNET PORTS**

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

# **CERTIFICATIONS AND STANDARDS**

| UL                  | CULUS   |
|---------------------|---|
| 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 60068-2-2 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<br>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

| ontent | Gateway, power connector, serial connector, start-up guide, compliance information sheet |
|--------|--|
|        |  |

Box material Cardboard

# Communicator Web UI Intro

# 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:  $\underline{\text{How to buy}}$ 

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