

Anybus-Communicator

Order Code: ABC3007

Modbus RTU Master - EtherNet/IP Adapter

Integrate your Modbus RTU based industrial devices and equipment to EtherNet/IP 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 1 448 bytes of data in both directions (requires large forward open)
- -25 to +70 °C industrial temperature range
- Powered by award winning NP40 network processor
- · Security chip, security switch and secure boot

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 1 448 bytes of data

Demand for more data is constantly growing and the Communicator has been equipped to handle the challenge. It can transfer 1 448 bytes from the PLC to the Gateway and 1 448 bytes from the gateway to the PLC, 2 896 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 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.

EtherNet/IPTM Device Level Ring

To make sure communication can continue to flow even when cables break, the Communicator supports Device Level Ring with Beacon Mode for media redundancy, network fault detection and network fault resolution.

Diagnostics

When open the Communicator web interface you immediately see the status of the EtherNet/IP 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.

TECHNICAL SPECIFICATIONS

GENERAL

| Dimensions (L x W x H) with serial and power connector | 98 x 27 x 144 mm 3.85 x 1.06 x 5,67 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, NEMA rating 1 |
| Housing material | PC ABS, UL 94 VO |
| Mounting | DIN rail (35 * 7,5/15), EN50022 |

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 | 1 448 bytes |
| Output data size. | 1 448 bytes |

ETHERNET PORTS

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

ETHERNET/IPTM

| Mode | Adapter (slave) |
|--------------------------------|--|
| Messages | Implicit and explicit |
| Max no of scanner connections. | 1 input/output (exclusive owner) 3 listen only or input only |
| Input data size | 1 448 bytes (with large forward open) |
| Output data size | 1 448 bytes (with large forward open) |
| Network redundancy | Device Level Ring (DLR), beacon-based |
| | |

| Quick connect | Class B |
|---------------|-----------------|
| Certification | ODVA conformant |

CERTIFICATIONS AND STANDARDS

| UL | Certification pending |
|---------------------|---|
| 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 IEC 60068-2-6 |
| Waste certification | WEE |

CONFIGURATION

| ESD file | Available |
|------------------------|--|
| 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 |

MEAN TIME BETWEEN FAILURE

Ordering Information

ORDER CODE: ABC3007 WARRANTY: 3 years

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

Copyright © 2020 HMS Industrial Networks - All rights reserved.