



Anybus Communicator - EtherNet/IP Adapter

Integrate your serial RS-232/485 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.

CONVERT ALMOST ANY TYPE OF SERIAL PROTOCOL

The Communicator can convert both standard serial protocols such as Modbus RTU and proprietary serial request/response or produce/consume based protocols.

TYPICAL SERIAL APPLICATIONS

Typical serial applications include variable frequency drives, sensors, actuators, human machine interfaces, barcode readers, RFID readers and industrial scales among others.



EtherNet/IP™

FEATURES & BENEFITS

- Transfer up to 1 448 bytes of data in both directions (requires large forward open)
- Convert standard and proprietary RS-232/485 protocols
- Web-based drag and drop configuration interface
- -25 to +70 °C industrial temperature range
- Powered by award winning NP40 network processor
- Security chip, security switch and secure boot

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.

EtherNet/IP™ 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.

Drag and drop web interface

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

Industrial temperature range

An industrial operating temperature range of -25 to +70 °C ensures 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 prevents 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 opening the Communicator web interface you immediately see the status of the PROFINET 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

ETHERNET/IP FEATURES

- EtherNet/IP adapter mode
- Transfer up to 1 448 bytes to and from EtherNet/IP
- Class 1 and Class 3 connection for process data
- EtherNet/IP CONFORMANCE TESTED™ by ODVA
- Device Level Ring (beacon mode)
- Quick Connect class B
- Dual RJ45 Ethernet ports with 10/100 Mbit full duplex
- Daisy chaining with integrated switch

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, PROFINET and Serial 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	1 024 bytes
Output data size.	1 024 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/IP

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	cULUSfile number E214107
CE	2014/30/EU
KC	R-R-ABJ-Communicator
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

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GSDML file	Available
Configuration software	Web based configuration
Configuration ports	Dedicated 10/100 Mbit RJ45 Ethernet configuration port and Ethernet 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

MTBF	> 1500000 h, Telcordia Method I Case 3 at 30° C
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Ordering Information

ORDER CODE: ABC3007

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