

Anybus Communicator PROFIBUS

Order Code: ABC3000

Serial Master – PROFIBUS IO-Device

Integrate your serial RS-232/485 based industrial devices and equipment to PROFIBUS 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.



FEATURES & BENEFITS

- Transfer up to 244 bytes of data in both directions
- 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

Transfer up to 244 bytes of data

Demand for more data is constantly growing and the Communicator has been equipped to handle the challenge. It can transfer 244 bytes from the PLC to the Gateway and 244 bytes from the gateway to the PLC, 488 bytes in total. Support for up to 150 Modbus commands means even complex configurations with multiple nodes can be handled with ease.

EXCELLENT PERFORMANCE

- Transfers up to 1024 bytes in each direction.
- Instant data transfer- The time it takes to transfer data between two PLCs consists of the cycle time on the first network plus the cycle time on the second network. Internal data transfer in the Communicators is negligible as it's in line with the natural variation of the network cycle times (jitter).
- Hardware-accelerated endian conversion (byte swap) - The Communicators can change the data representation (endianness) through a hardware-accelerated endian conversion to ensure data is presented correctly in each PLC. You can even convert different parts of the data area in different ways to handle different data types. It has no impact on performance, offloads the PLC of the data conversion task, and simplifies PLC programming.

EASY TO USE

- Dedicated ethernet configuration port - no special cables required.
- Intuitive web-based drag and drop configuration interface - no need to install any additional software.
- Forward-facing ports make it easy to connect cables and the slim form factor saves space on the DIN rail.
- Troubleshoot problems with powerful diagnostics including live data monitor, status screen, and support package.

LATEST SECURITY FEATURES

- Secure boot functionality to detect tampering with firmware and resist attacks and infection from malware.
- Security switch which locks your configuration and prevents any unauthorized access.

DESIGNED FOR INDUSTRIAL ENVIRONMENT

- Robust compact housing.
- Industrial components tested and certified according to CE and UL.
- Wide temperate range, -25°C to 70°C.
- DIN-rail mounting to enable installation close to connected devices, reducing the amount of wiring.

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

PROFIBUS FEATURES

- PROFIBUS DPV1 & DPV0 Device (slave)
- Transfer up to 244 bytes to and from PROFIBUS (488 bytes total)
- Automatic baud rate detection up to 12 Mbit/s
- PROFIBUS slave address setting via on-board rotary switches or web interface
- Supports Sync and Freeze and Watchdog
- Supports I&M 0-3
- 1x D-sub 9-pin female PROFIBUS connector
- GSD file available

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-pin plug with screw terminal
Protection	Reverse voltage protection and short circuit protection

ETHERNET PORTS

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

PROFIBUS

Mode	PROFIBUS DPV1 Device (slave)
Input data size	244 bytes
Output data size	244 bytes
Baude rate	Automatic baud rate detection up to 12 Mbit/s
Rotary switches	PROFIBUS slave address setting via onboard rotary switches or web interface
Features	Supports Sync and Freeze and Watchdog
I&M records	Manufacturer data (I&M0), Tag information (I&M1), Date/Time (I&M2), Description (I&M3)
Connector	1x D-sub 9-pin female PROFIBUS connector
GSD	GSD file available

CERTIFICATIONS AND STANDARDS

UL	UL file 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

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, 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	ABC3000
Included components	Anybus Communicator - PROFIBUS

3 year guarantee. For purchasing instructions and terms and conditions, see: [How to buy](#)