

# Anybus Communicator - Modbus TCP server - PROFIBUS DP device

The Anybus Communicator Modbus TCP server – PROFIBUS DP device is an industrial protocol gateway that allows you to seamlessly transfer data between PLC control systems over Modbus TCP and PROFIBUS networks.

Anybus Communicators are designed to ensure reliable, secure, and high-speed data transfer between different industrial Ethernet and Fieldbus networks. Very easy to install and deploy, the stand-alone gateways enable transparent data exchange between PLCs, allowing you to integrate legacy equipment into modern, high-performance networks without any changes to the hardware and only minimal changes to the software.

Anybus Communicators are built using the award-winning and proven Anybus NP40 industrial network processor providing network conformance, high performance, and reliability. When connecting between PLCs on different networks, extremely fast data cycling is enabled with data transfer of up to 1500 bytes in each direction, meeting most current control application needs as well as supporting future demands.

Quick installation is ensured thanks to the intuitive configuration, easy-to-understand documentation, and smart hardware and housing design.

#### **Excellent performance**

- Instant data transfer The time required for data transfer between two PLCs is made up of the cycle time of the first network plus the cycle time of the second network. The internal data transfer in the communicator is negligible because it corresponds to the natural fluctuations of the network cycle times (jitter).
- Hardware-accelerated endian conversion (byte swap) Communicators can change the data representation (endianness) using hardware-accelerated endian conversion to ensure that data is represented correctly in each PLC. You can even convert different parts of the data area in different ways to handle different types of data. This has no impact on performance, relieves the PLC of the data conversion task, and simplifies PLC programming.

#### Easy startup

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

#### Latest security features

- Secure boot functionality to detect firmware tampering and protect against malware attacks and infections.
- Security switch that locks your configuration and prevents any unauthorized access.
- The ports used in production have been disabled to prevent malware from being loaded via the ports.

#### For industrial environments

Robust, compact housing.

dustrial components are CE and UL tested and certified.

Nide temperature range, -25°C to 70°C.

• Top-hat rail mounting for installation close to the connected devices, reducing wiring effort.



#### **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

#### **PROFIBUS DP DEVICE 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 onboard 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

## ANYBUS' SECOND-GENERATION GATEWAYS OFFER WORLD-LEADING USABILITY THANKS TO THE INTUITIVE GRAPHICAL USER INTERFACE (GUI).

The User Interface enables you to:

- Change the configurations without installing additional software
- Use drag and drop functionality to configure the gateway
- Import or export files or firmware
- Analyze live data or export a log file for deeper analysis
- Use the support tab to open the relevant user guide or generate a customized support package
- Want to brand your interface? No problem! Customize the interface to meet your look



#### **INTERESTED?**

Click on the link to watch the User Interface in action. You can even try the user Interface before you buy!



#### 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, Network 1 & Network 2
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
	ower connector	3-pin plug with screw terminal

Protection Reverse voltage protection and short circuit protection	ction
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#### **ETHERNET PORTS**

Ports	2 x Ethernet ports per Ethernet protocol
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

#### MODBUS TCP

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

#### CERTIFICATIONS AND STANDARDS

UL	CUL <sub>US</sub> file number E214107
CE	2014/30/EU
КС	R-R-ABJ-Communicator (Pending for EtherCAT MainDevice)
ЕМС	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

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	> 1 500 000 h, Telcordia Method I Case 3 at 30° C

File

Version

Size

Read online

### Ordering Information

#### **ORDER CODE: ABC4018-A**

WARRANTY: 3 years

For purchasing instructions and terms and conditions, see: How to buy

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