Anybus Communicator Modbus TCP Client – PROFINET IO Device

The Anybus Communicator Modbus TCP Client to PROFINET enables you to connect Modbus TCP devices to PROFINET control systems. Anybus Communicators ensure reliable, secure, and high-speed data transfer between different industrial networks. Thanks to our intuitive web-based user interface, they're also incredibly easy to use.

High performance

Powered by the award-winning NP40 network processor, it enables instant transfer of up to 1500 bytes (network dependent) between networks, totaling 3000 bytes.

Instant data transfer

Instant data transfer lets you take advantage of high-speed industrial networks.

Endian conversion

The Communicator provides hardware-accelerated endian conversion (byte swap), saving processing time on the PLC.

Intuitive user interface

Use the intuitive web-based user interface to easily configure the Communicator via the drag-and-drop functionality or to analyze live data and generate support packages.

Cybersecurity

Despite advanced security, human error often causes breaches. Our Communicator's physical security switch can lock configurations and block web interface access, enhancing security.

Optimized hardware design

The Communicator has forward-facing ports and is designed for IP20 and DIN-rail mounting, enabling you to install it with ease, close to connected devices, thereby reducing wiring requirements.

Diagnostics

The user interface displays real-time connection status and I/O data mapping for easy troubleshooting. Easily generate a support file containing all the necessary information.
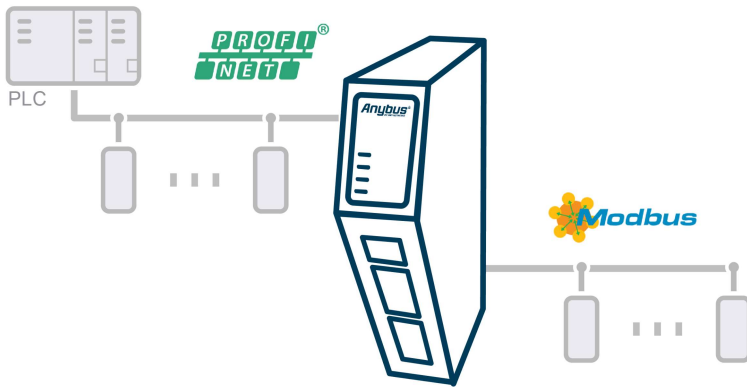
5-year warranty

Thanks to carefully selected industrial components the Communicator operates reliably in harsh environments, ensuring uptime and longevity. Our confidence in quality is reflected in a 5-year warranty.

Life cycle management

HMS maintains every part of the Communicator, including network updates, throughout the product's lifecycle.

- Modbus TCP Client (master)
- Transfer up to 1 500 bytes to and from Modbus TCP Client (3000 bytes total)
- Connect up to 64 Modbus TCP Servers (slaves)
- 10 ms Modbus TCP Client cycle time
- Visual I/O configuration for data mapping (drag and drop)
- Transfer data cyclically or on data change
- Monitor and control Modbus TCP transactions from control system with Live list and Data exchange control
- Control how data transfer is initiated with network start-up options
- Handle control system (PLC) offline situations with freeze, pause and safe value options
- Ability to import Anybus legacy configuration file (from Anybus AB9xxx series gateways)
- Dual RJ45 Ethernet ports with 10/100 Mbit full duplex
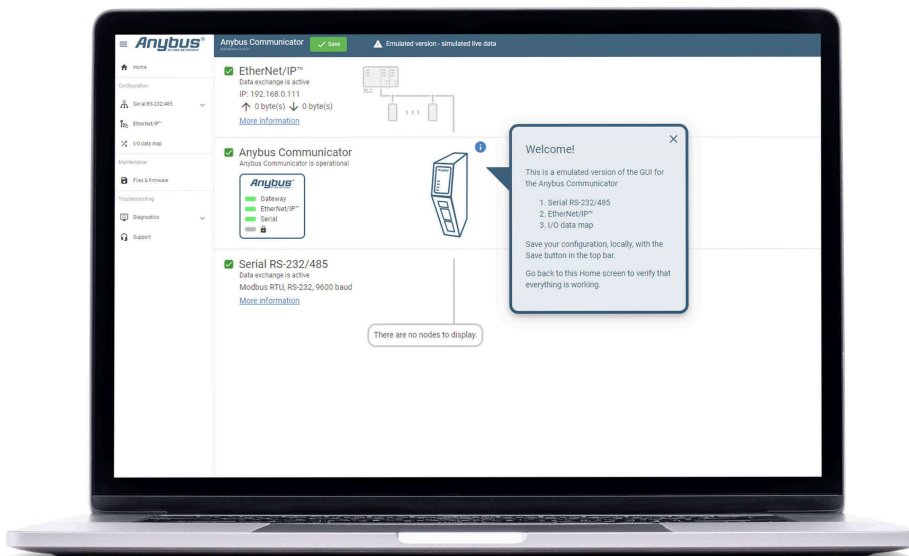- Daisy chaining with integrated switch

PROFINET IO DEVICE FEATURES

- PROFINET IO-Device (slave)
- Transfer up to 1 024 bytes to and from PROFINET (2048 bytes total)
- 1 ms minimum cycle time
- Conformance class B, Real-Time (RT)
- High robustness against network load, Netload Class III
- Dual RJ45 Ethernet ports with 10/100 Mbit full duplex
- Daisy chaining with integrated switch

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!

→ Learn more

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: 90 mA @ 24V (2.2 W)
ower connector	3-pin plug with screw terminal

Protection	Reverse voltage protection and short circuit protection

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

MODBUS TCP CLIENT

Mode	Modbus TCP Client (Master)
Input data size	1500 bytes
Output data size	1500 bytes
Functions supported	Read Coils, Read Discrete Inputs, Read Holding Registers, Read Input Registers, Write Single Coil, Write Single Register, Write Multiple Coils, Write Multiple Registers, Read/Write Multiple Registers
Max numbers of transactions	152
Minimum cycle time	10 ms
Max number of connections	64
Network start-up modes	Directly, Wait for data
Offline options	Freeze, pause or safe value
Live list	Monitor up to 152 transactions from control system (PLC)
Data exchange control	Control up to 152 transactions from control system (PLC)

PROFINET

Mode	PROFINET IO-Device (slave)
Class	A, B
Communication channels	Real Time Channel (RT)
Input data size	1 024 bytes
Output data size	1 024 bytes
Minimum cycle time	1 ms
Max number of connections	1 IO Controller Application Relationship + 2 Device Access Application Relationships
Netload class	Class III

I&M records	Manufacturer data (I&M0), Tag information (I&M1), Date/Time (I&M2), Description (I&M3)
SNMP	Available
GSDML File	Available
Certification	PI Certified

CERTIFICATIONS AND STANDARDS

UL	$_C$UL$_{US}$file number E214107
CE	2014/30/EU
KC	R-R-ABJ-Communicator (Pending for EtherCAT MainDevice)
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

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: ABC3213

WARRANTY: 5 years

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