

MANUFACTURER DOCUMENT PACKAGE

# Manufacturer's Manual

Reference package for procurement and maintenance review

ANYBUS

## AB9001-B

MODBUS TCP PROFIBUS GATEWAY

Used with the applicable Anybus X-gateway protocol converters configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: HMS Networks AB9001-B Anybus X-gateway manufacturer datasheet

## Anybus X-gateway - Modbus TCP Client - PROFIBUS Slave

Item number: AB9001-B

The Anybus X-gateway Modbus TCP Client to PROFIBUS Slave enables you to connect any Modbus TCP device or equipment to PROFIBUS control systems. It can be used when there is no existing Modbus TCP control system. Anybus gateways ensure reliable, secure, high-speed data transfers between different industrial networks while being easy to use.



*A protocol converter that connects Modbus TCP devices to PROFIBUS PLCs*

### Features and benefits

- ✓ **Reach new markets**  
Target new markets using different protocols without needing to change your hardware or software, thereby decreasing your time to market and development costs.
- ✓ **Slim hardware design**  
The gateway is designed for IP20 and DIN-rail mounting, enabling you to install it with ease, close to connected devices, thereby reducing wiring requirements.
- ✓ **Easy configuration – No programming required!**  
Quickly establish the connection between the two networks with the included Anybus Configuration Manager software. No programming skills are required for the setup process.
- ✓ **Powerful**  
Up to 512 bytes of Input and Output data in each direction.
- ✓ **Life cycle management**  
HMS maintains every part of the gateway, including network updates, throughout the product's lifecycle.
- ✓ **No PLC card slot needed**  
The gateway does not use a card slot in the control system, leaving room for other equipment.
- ✓ **3-year warranty**  
The gateway is designed to be robust and long-lasting. A 3-year guarantee is provided.
- ✓ **Increased PLC performance**  
The gateway allows for fast transfer of cyclic I/O data between the two networks, offloading your PLC from working with additional calculations.
- ✓ **Trusted partner**  
Anybus has a long history of working with all the major network organizations to ensure compliant, high-performing, and compatible products.

# Anybus X-gateway - Modbus TCP Client - PROFIBUS Slave



| General                                        |                                    |
|------------------------------------------------|------------------------------------|
| Net Width (mm)                                 | 35                                 |
| Net Height (mm)                                | 110                                |
| Net Depth (mm)                                 | 101                                |
| Net Weight (g)                                 | 160                                |
| Packed Width (mm)                              | 135                                |
| Packed Height (mm)                             | 55                                 |
| Packed Depth (mm)                              | 170                                |
| Packed Weight (g)                              | 220                                |
| Operating Temperature °C Min                   | -25                                |
| Operating Temperature °C Max                   | 60                                 |
| Storage Temperature °C Min                     | -40                                |
| Storage Temperature °C Max                     | 85                                 |
| Current Consumption Type Value at Vcc Nom (mA) | 150mA @ 24V DC                     |
| Current Consumption Max value at Vcc nom (mA)  | 300mA @ 24V DC                     |
| Power Connector                                | 3-pin, 5.08 Phoenix plug connector |
| Isolation                                      | TRUE                               |
| Mounting                                       | DIN-rail (EN 50022 standard)       |
| Housing Materials                              | Plastic                            |
| Packaging Material                             | Cardboard                          |

# Anybus X-gateway - Modbus TCP Client - PROFIBUS Slave



## Identification and Status

|                   |            |
|-------------------|------------|
| Product ID        | AB9001-B   |
| Successor         | ABC3200-A  |
| Country of Origin | Sweden     |
| HS Code           | 8517620000 |
| Dual Usage        | No         |

## Physical Features

|                             |                                                  |
|-----------------------------|--------------------------------------------------|
| Connectors / Input / Output | 2xRJ45, 1x D-sub 9-pin female PROFIBUS connector |
| Contains Battery            | No                                               |

## Modbus-TCP Features

|                                    |                                                                                    |
|------------------------------------|------------------------------------------------------------------------------------|
| Modbus-TCP Mode                    | Master / Client                                                                    |
| Modbus-TCP Supported Functionality | Modbus specification V1.1B; Endian Conversion (Byte swap); LiveList; ControlStatus |
| Modbus-TCP No. Of Servers          | 64 transactions                                                                    |
| Modbus-TCP Functions Supported     | 1, 2, 3, 4, 5, 6, 15, 16, 23                                                       |
| Modbus-TCP Bandwidth               | 10/100 Mbit/s down to 10ms                                                         |
| Modbus-TCP Input Data Size         | 256 bytes                                                                          |
| Modbus-TCP Output Data Size        | 256 bytes                                                                          |

## PROFIBUS Features

|                                  |                                                                                                                                                                                                                 |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PROFIBUS Mode                    | Slave                                                                                                                                                                                                           |
| PROFIBUS Supported Functionality | PROFIBUS-DP/DPV1 Slave functionality according to extensions of EN 50170; Acyclic Communication (DP-V1, Class 1 & 2);Acyclic User Parameter data / Diagnostics length - up to 237 bytes; Sync; Freeze; Watchdog |
| PROFIBUS Device Address          | 0-125                                                                                                                                                                                                           |
| PROFIBUS Configuration File      | GSD available                                                                                                                                                                                                   |
| PROFIBUS Baud Rate               | 9600 bit/s - 12 Mbit/s                                                                                                                                                                                          |

# Anybus X-gateway - Modbus TCP Client - PROFIBUS Slave



## PROFIBUS Features

|                                  |           |
|----------------------------------|-----------|
| <b>PROFIBUS Input Data Size</b>  | 244 bytes |
| <b>PROFIBUS Output Data Size</b> | 244 bytes |

## Certifications and Standards

|                               |                                                                                                                                                                                     |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Protection Class IP</b>    | IP20                                                                                                                                                                                |
| <b>Product Certifications</b> | CE, UL, WEEE                                                                                                                                                                        |
| <b>UL Information</b>         | E214107: Ord.Loc UL 61010-1, UL 61010-2-201, CSA C22.2 NO. 61010-1-12, CSA C22.2 NO. 61010-2-201:14; E203225: Haz.Loc CL I DIV2 GP A,B,C,D T4, ANSI/ISA 12.12.01, ANSI/ISA 12.12.01 |
| <b>ATEX Information</b>       | II 3 G Ex nA IIC T4 Gc, EN IEC 60079-0; EN 60079-15                                                                                                                                 |
| <b>Environment</b>            | EN 61000-6-4, EN 55016-2-3 Class A, EN 61000-6-2, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6                                                              |
| <b>WEEE Category</b>          | IT and telecommunications equipment                                                                                                                                                 |