

## Anybus Communicator – Serial Master to PROFINET- IRT

Item number: AB7078-B

The Anybus Communicator – Serial Master to PROFINET-IRT converts serial protocols to PROFINET-IRT, enabling you to connect any RS-232/485 device or equipment to PROFINET-IRT control systems. Anybus Communicators ensure reliable, secure, high-speed data transfers between different industrial networks while being easy to use.



*A protocol converter that connects serial devices to PROFINET-IRT control systems.*

### Features and benefits

- ✓ **No hardware or software changes needed**  
Pre-defined for Modbus RTU. Avoid the hassle of scripting and building serial Modbus frames with the 6-step Modbus RTU wizard.
- ✓ **Compatible**  
Convert any standard serial protocol such as Modbus RTU, DF1, or any other Request/Response or Produce/Consume proprietary protocol, in just a few minutes.
- ✓ **3-year warranty**  
The Communicator is designed to be robust and long-lasting. A 3-year guarantee is provided.
- ✓ **Convert standard and proprietary serial protocols**  
Convert standard serial protocols such as Modbus RTU and proprietary serial request/response or produce/consume-based protocols.
- ✓ **Daisy chaining**  
Versions with Dual Port switched Ethernet allow for daisy chaining and eliminate the need for external switches.
- ✓ **Life cycle management**  
HMS maintains every part of the Communicator, including network updates, throughout the product's lifecycle.
- ✓ **Hassle-free Connection to Modbus RTU**  
Pre-defined for Modbus RTU. Avoid the hassle of scripting and building serial Modbus frames with the 6-step Modbus RTU wizard.
- ✓ **Slim hardware design**  
The Communicator is designed for IP20 and DIN-rail mounting, enabling you to install it with ease, close to connected devices, thereby reducing wiring requirements.
- ✓ **Increased PLC Performance**  
The Communicator performs an intelligent protocol conversion and presents the serial data to the PLC control system as easily processed I/O data.
- ✓ **Save & Load**  
The Save/Load function enables a completed configuration to be re-used for other installations.
- ✓ **Trusted partner**  
Anybus has a long history of working with all the major network organizations to ensure compliant, high-performing, and compatible products.

# Anybus Communicator – Serial Master to PROFINET-IRT



## General

|                                                |                                    |
|------------------------------------------------|------------------------------------|
| Net Width (mm)                                 | 27                                 |
| Net Height (mm)                                | 120                                |
| Net Depth (mm)                                 | 75                                 |
| Net Weight (g)                                 | 150                                |
| Packed Width (mm)                              | 135                                |
| Packed Height (mm)                             | 55                                 |
| Packed Depth (mm)                              | 170                                |
| Packed Weight (g)                              | 300                                |
| Operating Temperature °C Min                   | 0                                  |
| Operating Temperature °C Max                   | 55                                 |
| Storage Temperature °C Min                     | -40                                |
| Storage Temperature °C Max                     | 85                                 |
| Relative Humidity                              | 0-95% non condensing               |
| Current Consumption Type Value at Vcc Nom (mA) | 100mA @ 24V DC                     |
| Current Consumption Max value at Vcc nom (mA)  | 300mA @ 24V DC                     |
| Input Voltage (V)                              | 24V DC (-10% to +10%)              |
| Power Connector                                | 2-pin, 5.08 Phoenix plug connector |
| Reverse Polarity Protection                    | Yes                                |
| Short Circuit Protection                       | Yes                                |

# Anybus Communicator – Serial Master to PROFINET-IRT



## General

|                                   |                              |
|-----------------------------------|------------------------------|
| Isolation                         | TRUE                         |
| Maximum Installation Altitude (m) | up to 2 000 m                |
| Mounting                          | DIN-rail (EN 50022 standard) |
| Housing Materials                 | PC ABS, UL 94                |
| Packaging Material                | Cardboard                    |

## Identification and Status

|                   |            |
|-------------------|------------|
| Product ID        | AB7078-B   |
| Country of Origin | Sweden     |
| HS Code           | 8517620000 |
| Dual Usage        | No         |

## Physical Features

|                             |                                |
|-----------------------------|--------------------------------|
| Connectors / Input / Output | 1x D-sub 9-pin female, 2x RJ45 |
| Contains Battery            | No                             |

## Modbus-RTU Features

|                                    |                                                                                                                                                                                                                                          |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Modbus-RTU Mode                    | Client / Master                                                                                                                                                                                                                          |
| Modbus-RTU Supported Functionality | RS-232; RS-422; RS485; DF1; Standard Modbus RTU Master; Custom Request / Response commands; Custom Produce / Consume transactions; Trigger initiated transactions 7 or 8 data bit; None, Odd, Even Parity; 1 or 2 stop bit; Clear/Freeze |
| Modbus-RTU Functions Supported     | 1, 2, 3, 4, 5, 6, 7, 8, 11, 12, 15, 16, 17, 20, 21, 22, 24                                                                                                                                                                               |
| Modbus-RTU Baud Rate               | 1200,1800,2400,4800,7200,9600,14400,19200,35700,38400,57600 bit/s                                                                                                                                                                        |
| Modbus-RTU Input Data Size         | 512 bytes                                                                                                                                                                                                                                |
| Modbus-RTU Output Data Size        | 512 bytes                                                                                                                                                                                                                                |

## PROFINET Features

|                                  |            |
|----------------------------------|------------|
| PROFINET Mode                    | Slave      |
| PROFINET Supported Functionality | IRT; SNMP; |

# Anybus Communicator – Serial Master to PROFINET-IRT



## PROFINET Features

|                                    |                                            |
|------------------------------------|--------------------------------------------|
| <b>PROFINET Configuration File</b> | GSDML available                            |
| <b>PROFINET Bandwidth</b>          | 100MBit full duplex down to 1ms cycle time |
| <b>PROFINET Input Data Size</b>    | 512 bytes                                  |
| <b>PROFINET Output Data Size</b>   | 512 bytes                                  |

## Serial Features

|                                |                                                                                                                                                                                                                                          |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Connector</b>               | 1x D-sub 9-pin female                                                                                                                                                                                                                    |
| <b>Max Nodes</b>               | 31                                                                                                                                                                                                                                       |
| <b>Baud Rate</b>               | 1200,1800,2400,4800,7200,9600,14400,19200,35700,38400,57600 bit/s                                                                                                                                                                        |
| <b>Supported Functionality</b> | RS-232; RS-422; RS485; DF1; Standard Modbus RTU Master; Custom Request / Response commands; Custom Produce / Consume transactions; Trigger initiated transactions 7 or 8 data bit; None, Odd, Even Parity; 1 or 2 stop bit; Clear/Freeze |

## Certifications and Standards

|                               |                                                                                                                          |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| <b>Protection Class IP</b>    | IP20                                                                                                                     |
| <b>RoHS Compliant</b>         | Yes                                                                                                                      |
| <b>Recycle / Disposal</b>     | TRUE                                                                                                                     |
| <b>Product Certifications</b> | CE, UL, WEEE                                                                                                             |
| <b>UL Information</b>         | E214107: Ord.Loc UL508, CSA C22.2 No. 14-10; E203225: Haz.Loc CL I DIV2 GP A,B,C,D, ANSI/ISA 12.12.01, CSA C22.2 No. 213 |
| <b>Environment</b>            | EN 50082-2, EN 55011, 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                                                                                      |