



## Anybus Communicator - Interbus

Integrate your serial RS-232/422/485 based industrial devices and equipment to a Interbus control system without the need for any changes to the device. Just connect, configure and you're done!

The Anybus® Communicator™ is a proven and trusted protocol converter gateway that connects non-networked industrial devices and equipment to Interbus. The gateway performs an intelligent protocol conversion and presents the serial data to the Master PLC/Controller as easily processed I/O data.

The Communicator is slim stand-alone gateway designed for IP20 and DIN-rail mounting, requiring a 24-volt power supply. The Communicator is conformance tested to current Interbus specifications guaranteeing network compatibility.



### CONVERT ALMOST ANY TYPE OF SERIAL PROTOCOL

The Communicator is capable of converting almost any type of serial protocol such as Modbus RTU, ASCII, DF1 or any other type of proprietary Request/Response or Produce/Consume protocol.

### FEATURES & BENEFITS

- Convert almost any RS-232/422/485 Request/Response or Produce/Consume protocol in just a few minutes — For example Modbus RTU, ASCII, DF1.
- Pre-defined for Modbus RTU. Avoid the hassle of scripting and serial Modbus frame building with the 6-step Modbus RTU wizard.
- No hardware or software changes are required for the connected automation device
- Compatible with PLCs from leading manufacturers such as Siemens, Rockwell, Schneider Electric etc
- Complete protocol conversion performed by the Communicator, no PLC function blocks required
- Handy Save/Load function means a completed configuration can be re-used for many other installations
- Included "Anybus Configuration Manager" with flexible serial frame building capabilities
- Versions with Dual Port switched Ethernet allows for daisy chaining and eliminates the need for external switches
- Global free technical support and consultancy

### SERIAL FEATURES

No high level programming skills are needed to set up the Anybus® Communicator as configuration is accomplished using the included, easy to use Windows™ based ACM (Anybus Configuration Manager).

- Selectable RS-232/422/485 interface
- Pre-defined 6-step Modbus-RTU configuration wizard
- Selectable pre-loaded DF1 commands. No scripting or serial frame building required!
- Ability to configure ASCII or vendor specific protocols (Request/Response or Produce/Consume via a visual frame building interface
- Multi-language support for English, German, Spanish, Italian, French, Polish, Russian, Chinese and Japanese
- Handy Save/Load function allows for a completed configuration to be re-used for many other installations
- Password protection prevents unauthorized upload and download of configurations
- Serial Line Listener and In-built Checksum calculations for diagnostic and troubleshooting

### INTERBUS INTERFACE FEATURES

- Complete Interbus functionality according to EN 50170
- Max. 20 bytes of process data (512 bytes with PCP) in each direction
- PCP V.2.0. (0, 1, 2, or 4 words)
- Interbus baudrate 500 kbit/s – 2 Mbit/s
- Automatic slave address detection by controlling PLC master

- 1x D-sub 9-pin male and 1x D-sub 9-pin female network connector

TECHNICAL SPECIFICATIONS

COMMUNICATOR RS-232/422/485

|                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Protocol           | Configurable RS-232/422/485 based produce/consume, query/response ASCII                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Max stations       | 31 (with RS485/422)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Baud rate          | 1,2-57,6 kbit/s                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Physical standards | RS232/422/485                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Modbus Commands    | 0x01 Read Coils, 0x02 Read Discrete Inputs, 0x03 Read Holding Registers, 0x04 Read Input Registers, 0x05 Write Single Coil, 0x06 Write Single Register, 0x07 Read Exception Status, 0x08 Diagnostics, 0x0B Get Comm Event Ctr, 0x0C Get Comm Event Log, 0x0F Write Multiple Coils, 0x10 Write Multiple Registers, 0x11 Report Slave ID, 0x14 Read File Record, 0x15 Write File Record, 0x16 Mask Write Register, 0x17 Read/Write Multiple Registers, 0x18 Read FIFO Queue Customized commands can be created (in the Anybus Configuration Manager) |
| DF1 Services       | 0x01 Integrity Check, 0x02 Read Diagnostics, 0x03 Read Data, 0x04 Write Data Customized services can be created (in the Anybus Configuration Manager) Technical Details Standard                                                                                                                                                                                                                                                                                                                                                                   |

TECHNICAL DETAILS

|                                                        |                                         |         |
|--------------------------------------------------------|-----------------------------------------|---------|
| Dimensions (L x W x H) with serial and power connector | 120 x 75 x 27 mm<br>4,72 x 2,95 x 1,06" |         |
| Weight                                                 | 150 grams, 0.33 lb                      |         |
| Protection class                                       | IP20 Nema rating 1                      |         |
| Enclosure material                                     | I PC ABS, UL 94                         |         |
| Installation position                                  | Any                                     |         |
| Mounting                                               | DIN rail (35 * 7,5/15)                  | EN50022 |

CERTIFICATIONS

|                     |                                               |                              |
|---------------------|-----------------------------------------------|------------------------------|
| UL                  | File number: E203225                          | UL 508 Ind. Cont. Eq.        |
| Hazardous Locations | CLASS 1, DIVISION 2, GROUPS A, B, C AND D, T4 | ISA 12.12.01                 |
| CE                  | 2004/108/EC                                   | EN 61000-6-4<br>EN 61000-6-2 |

ELECTRICAL CHARACTERISTICS

|                     |                            |
|---------------------|----------------------------|
| Power               | 24 VDC +/- 10 %            |
| Current consumption | Max 300 mA, Typical 100 mA |

ENVIRONMENTAL CHARACTERISTICS

|                                  |            |                                              |
|----------------------------------|------------|----------------------------------------------|
| Reverse voltage protection       | Yes        |                                              |
| Short circuit protection         | Yes        |                                              |
| Galvanic isolation on subnetwork | Yes        | EN 60950-1                                   |
| MTTF                             | >550 000 h | Telcordia Issue 2, Method 1 Case 3 at 30 o C |

HARDWARE CHARACTERISTICS

|                |                            |
|----------------|----------------------------|
| Operating temp | 0 to 55 o C, 32 to 131 o F |
|----------------|----------------------------|

|                              |                               |
|------------------------------|-------------------------------|
| <b>Storage temp</b>          | -40 to 85 o C, -40 to 185 o F |
| <b>Relative Humidity</b>     | 0-95% non condensing          |
| <b>Installation altitude</b> | up to 2 000 m                 |

#### IMMUNITY AND EMISSION FOR INDUSTRIAL ENVIRONMENT

|                                   |                                                                             |              |
|-----------------------------------|-----------------------------------------------------------------------------|--------------|
| <b>Electrostatic discharge</b>    | +/- 4 kV                                                                    | EN 61000-4-2 |
| <b>Electro magnetic RF fields</b> | 10 V/m 80 MHz - 1 GHz<br>3 V/m 1,4 GHz - 2,0 GHz<br>1 V/m 2,0 GHz - 2,7 GHz | EN 61000-4-3 |
| <b>Fast Transients</b>            | +/- 1 kV                                                                    | EN 61000-4-4 |
| <b>Surge protection</b>           | +/- 1 kV                                                                    | EN 61000-4-5 |
| <b>RF conducted interference</b>  | 10 V/rms                                                                    | EN 61000-4-6 |
| <b>Emission (at 10 m)</b>         | 40 dB 30 MHz - 230 MHz<br>47 dB 30 MHz - 1 GHz                              | CISPR 16-2-3 |

## Content of delivery

Configuration Cable (RS232) Port  
Installation sheet  
Dsub with screw terminals for sub network

## Ordering Information

**ORDER CODE: AB7012**

#### INCLUDED COMPONENTS:

- Quick start documentation
- Configuration cable (RS-232)
- D-sub connector with screw terminals for serial sub-network
- Configuration software available for download
- (Power supply not included)

#### OPTIONAL ACCESSORIES:

- USB-RS-232 configuration adapter (Order Code: 019570)

**GUARANTEE:** 3 years

For purchasing instructions and terms and conditions, see: → [How to buy](#)