Anybus®
BY HMS NETWORKS

Anybus Communicator - PROFIBUS

Integrate your serial RS-232/422/485 based industrial devices and equipment to a PROFIBUS 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 PROFIBUS. 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 PROFIBUS 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 Query/Response or Produce/Consume protocol.

TYPICAL SERIAL APPLICATIONS
Typical serial applications include variable frequency drives, sensors, actuators, human machine interfaces, barcode readers, RFID readers and industrial scales among others.

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

PROFIBUS INTERFACE FEATURES

- Complete PROFIBUS-DP slave according to IEC 61158
- Max 244 bytes of Input and 244 bytes of Output data - 416 bytes data length in total
- Automatic PROFIBUS baud rate detection (9600 bit / s - 12 Mbit / s)
- Supports PROFIBUS features: Sync and Freeze and Watchdog
- PROFIBUS uplink configuration via on-board switches or via .GSD file
- 1x D-sub 9-pin female PROFIBUS 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 4,72 x 2,95 x 1,06''	
Weight	150 grams, 0.33 lb	
Protection class	IP20 Nema rating 1	
Enclousure material	l 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 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
Storage temp	-40 to 85 o C, -40 to 185 o F
Relative Humidity	0-95% non condensing
Installation altitude	up to 2 000 m

IMMUNITY AND EMISSION FOR INDUSTRIAL ENVIRONMENT

Electrostatic discharge	+/- 4 kV	EN 61000-4-2
Electro magnetic RF fields	10 V/m 80 MHz - 1 GHz 3 V/m 1,4 GHz - 2,0 GHz 1 V/m 2,0 GHz - 2,7 GHz	EN 61000-4-3
Fast Transients	+/- 1 kV	EN 61000-4-4
Surge protection	+/- 1 kV	EN 61000-4-5
RF conducted interference	10 V/rms	EN 61000-4-6
Emission (at 10 m)	40 dB 30 MHz - 230 MHz 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: AB7000
INCLUDED COMPONENTS:
- Quick start documentation
- Configuration cable (RS-232) is supplied with every single-piece Communicator shipment
- D-sub connector with screw terminals for serial sub-network is supplied with every single-piece Communicator shipment
- 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: $\longrightarrow$ How to buy