Anybus®
BY HMS NETWORKS

Communicator IIoT

The Anybus Communicator IIoT is a proven and trusted protocol converter gateway that connects non-networked industrial devices and equipment based on serial and CAN communication to IIoT applications based on OPC-UA and MQTT. The gateway performs an intelligent protocol conversion after which is transmits the data to its subscribers inside a user created data model.

Typical Industries

APPLICATION EXAMPLE SINGLE-DROP

IT solution

TCP/IP

Anybus Communicator

RS-232
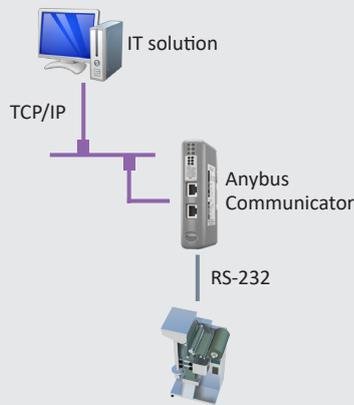
Industrial machine with a vendor specific Produce/Consume protocol

APPLICATION EXAMPLE MULTI-DROP

IT solution

TCP/IP

Anybus Communicator

Single   RS-485/422   Multi
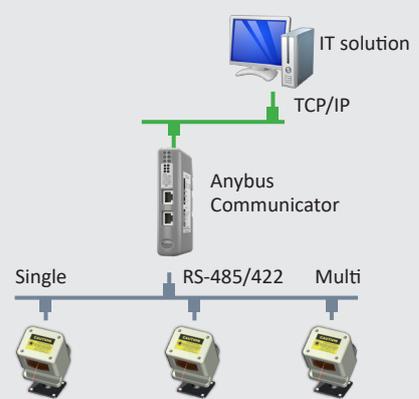
The Communicator works as a serial Modbus RTU master to the connected slave devices, and as a slave towards the PLC

Network: **Part No:**
MQTT/OPC UA   AB7079

Optional accessories
USB-RS232 configuration adapter
Part No: 019570

Features and benefits

- Allows system integrators to retro-fit older automation devices into the latest IIoT communication protocols

- Requires no hardware or software changes to be made to the connected device

- Performs complete serial protocol conversion

- Intelligent I/O data mapping within the Communicator permits even devices with slow serial communication can be integrated without any restrictions to the upper network

- Possibility to connect up to 31 nodes via one Communicator giving inexpensive IIoT network connectivity for your devices

- Integrated Email client, FTP server and embedded web server for diagnostics and data visualization

- Always free technical support from HMS and our global Anybus Distributors

Anybus Configuration Manager software
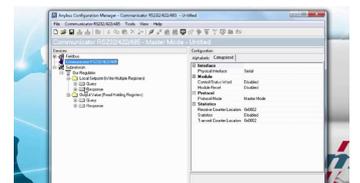
This Windows ™ based software has an easy-to-use user interface and requires no programming.

You can convert almost any RS-232/422/485 Request/Response or Produce/Consume protocol — Modbus RTU, ASCII, DF1, or user-specific.

The Communicator requires no PLC function blocks or programming. Just connect, configure and you're done.

HMS provides a full 3 year product guarantee

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

		Standard
Weight	150 g, 0,33 lb	
Dimensions (L•W•H)	120•75•27 mm, 4,72•2,95•1,06"	
Protection class	IP20, NEMA rating 1	
Enclosure material	PC ABS, UL 94	
Installation position	Any	
Mounting	DIN rail (35•7,5/15)	EN 50022

Certifications

UL	File number: E214107	UL 508 Ind. Cont. Eq.
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

Hardware 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 °C

Environmental Characteristics

Operating temp	0 to 55 °C, 32 to 131 °F
Storage temp	-40 to 85 °C, -40 to 185 °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

Single Pack Accessories

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

Network SPECIFIC FEATURES

OPC UA

- Support for micro-embedded profile
- Data direction from server to client
- Supports Discovery Services
- Timestamp supported via discovery server
- User name and password authentication
- Supports DataChange Subscription
- Maximum 80 data point tags
- Dual port cut-through switch
- Dual RJ-45 ports available simultaneously

MQTT

- MQTT client acting as publisher
- MQTT version 3.1.1 supported
- Json data encoding supported
- QoS 0-2 supported
- User name and password authentication
- Maximum 256 data point tags
- Dual port cut-through switch
- Dual RJ-45 ports available simultaneously

Status LEDs

Configuration switches (if existing, behind lid)

Network connector (see number 1 above)

DIN rail connector

Configuration port

RS subnetwork connector (DSUB 9-Pole female)

Power connector with screw terminals

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