Connecting Automation Devices™

TTG

ACP&D Limited

Anybus® Communicator

Connects almost any device designed for serial communication to all major fieldbus networks



PROFIBUS, DEVICENET, CC-LINK, CONTROLNET, MODBUS-TCP, ETHERNET/IP, CANOPEN, FIPIO, MODBUS PLUS, MODBUS-RTU & LONWORKS



🔢 🚽 Serial to fieldbus gateways

Take a closer look at the Anybus Communicator -Ideal for factory network implementation and upgrades

Anybus Communicator can connect almost any product with a serial RS-232/422/ 485 communication interface to fieldbus networks. In its simplest form, the Anybus Communicator operates in the Generic data mode and permits simple message routing between the serial device and its fieldbus interface, without sorting or processing the data in any way. It is also possible to perform some of the data processing in the Anybus Communicator such as CRC checksum calculations, which don't need to be transferred over the fieldbus. This saves engineering time and improves data throughput.



Target applications are for example drives, PLC's, controllers, text displays, HMI's, sensors, bar code readers, scales and instruments used in industrial processes.

Key Features

- » DIN-rail mountable
- » RS232/422/485 selection possible
- Max 512 bytes of Input data & 512 bytes of Output data
- » Supports Modbus RTU Master mode or Generic Data mode & ASCII
- Baudrate on the serial interface selectable between 9600 & 57.000 kbit/s
- » Multi-drop up to 31 nodes
- Line Listener to analyze serial telegrams on the sub-network
- Password protection prevents unauthorized upload and download of configurations
- Config Tool & Wizard for easy configuration and serial subnet setup
- Multi language support, now supporting English, German, Italian and French.

Tech Specification

- Size: 120 x 75 x 27mm (L x W x H) 4.72 x 2.95 x 1.06" (L x W x H)
- Housing: DIN-rail, Protection Class IP20 PE via DIN-rail
- Power Supply: 24V ± 10%
 Consumption: Max 280 mA on 24V
 Typically 100 mA
- Temperature: Operating -5°C to + 55°C Non-Oper. -5°C to + 85°C Humidity: 0 - 95% non-condensing
- EMC Compliance: CE Marked Emission: EN 50081-2:1993 Immunity: EN 61000-6-2:1999 UL&cUL Compliance: E214107
- » Tested & Verified for Fieldbus conformance

Almost any device with a serial connection can be connected!

The Generic Data Mode is based upon producer-consumer communication. For all field devices that have been designed with serial Modbus communication or similar, the Anybus Communicator additionally provides a Modbus RTU Master mode. This allows you to change the frame format of the Modbus telegrams according to custom specific protocols.

This takes communication between the serial sub-network and the fieldbus network one step further since the Anybus Communicator performs advanced data processing only exchanging user-defined data with the fieldbus master. In this mode the user can choose to work with pre-configured Modbus commands and/or fully user-definable transactions based upon request – response communication.

Together, these two modes make Anybus Communicator a powerful, configurable and flexible network product for handling data to and from a serial sub-network. The choice between its two operating modes is made during setup with the windows based configuration tool.

> DeviceNet EtherNet/IP Modbus-TCP CANopen CC-Link ControlNet LonWorks FIPIO Modbus-RTU Slave

Profibus



The System Integrators new best friend..!

The internal mapping of I/O data in the Anybus Communicator, instead of in the PLC makes this product an essential part of any factory network implementation or upgrade. Because it is not a card in the PLC rack it does not require any additional ladder code or increased scan time. Another major advantage is that you are not tied to the location of the PLC with the serial connection as the Communicator connects serial devices remotely to any fieldbus network, making it an easyier to use and a more cost effective solution, than the traditional "rack" style product on the market today!

with an easy 6 step network setup

Typical uses for the Anybus Communicator within a factory network!



The "ABC Config Tool" makes your network configuration quick and easy



The configuration tool "ABC Config Tool" includes Wizards for easy configuration of the Anybus Communicator. The Wizards make it "a piece of cake" for beginners to make a working configuration and can be downloaded free of charge from the HMS website.



Setting up your network and serial sub-network could not be easier with the Anybus Communicator Config Tool "ABC Config Tool" By following a 6 step process your network can be up and running in no time.

The Wizard leads the user through necessary steps and provides instant help "On Screen". When the Wizard is finished it is directly possible to download the configuration to the Communicator which can start to communicate with its assigned devices. It is also possible to make adjustments to the configuration in the standard ABC Config Tool environment prior to downloading. The wizard also provides functionality to save Device Types to file.

This makes it easy for OEM manufacturers to provide ready made device files for the end customers, giving a great flexibility when making the final application and providing a simple way of configuration for the end customer. Created Device Types can always be saved when using the Wizard allowing users to create libraries with previously used Device Types for easy integration in later projects.

Anybus Communicator family

Anybus technology - Proven in over 200,000 industrial applications

AB7001	AB7007	CANopen AB7003	FIPIO AB7011
 Baud rate 125-500 kbit/s DeviceNet 2.0 adapter ODVA, Group 2 only server Serial sub-network baud rate configurable up to 57.6 kbit/s Optically isolated DeviceNet interface Max 512 bytes input & 512 bytes output data DeviceNet supported features: I/O Slave Messaging - Bit Strobe, Polling, Cyclic & Change of State Supports FLASH field upgrades 	 IP address settings configurable through on-board DIP switches, Webpage, ARC or via ABC Config tool Baudrate 10/100 MBit/s Modbus/TCP class 0, class 1 & partial class 2 slave functionality EtherNet/IP level 2 I/O Server CIP(Common Interface Protocol) Transformer isolated Ethernet interface IT functions Dynamic Web Server, Email and FTP Supports FLASH field upgrades 	 Unscheduled data exchange support Selectable baud rates from 10kbit/s to 1Mbit/s MacID node address setting of up to 127 nodes Serial sub-network baud rate configurable up to 57.6 kbit/s Peer-to-peer messaging Optically isolated CAN interface Supports FLASH field upgrades 	 Complete FIPIO Slave functionality Max 64 bytes input and 64 bytes of Output data Supports all FIPIO profiles and classes Serial sub-network baud rate configurable up to 57.6 kbit/s RS-485 optically isolated FIPIO interface Supports FLASH field upgrades
LonWorks AB7009	Modbus Plus AB7002	CC-Link CC-Link AB7008	Modbus RTU AB7010
better immunity from magnetic & high-frequency common mode noise Amount and type of network variables configurable, data linking between Lon/Works variables (SNVT's) and ModBus Registers Up to 256 input and 256 output network variables Support for self installation LonMark objects and profiles supported	 Global database and peer-to-peer capabilities Max 256 words of input and 256 words of output data Baud rate 1Mbit/s Serial baud rate configurable up to 57.6 kbit/s Configuration of node ID and source ID via DIP switches Supports FLASH field upgrades 	 Total 128 I/O points (bit) and 32 Words Number of occupied stations: 1-4 Supports profiles for a "Remote Device" Baud rate: 156 kpbs, 625 kpbs, 2,5 Mbit/S, 5 Mbit/S, 10 Mbit/s Supports FLASH field upgrades 	 * (PI-MBUS-300) Modbus RTU Slave functionality * Max 512 bytes input and 512 bytes of Output data * Serial sub-network baud rate configurable up to 57,6 kbit/s * RS-485 optically isolated FIPIO interface * Supports FLASH field upgrades
	AB7001 AB7001 AB7001 AB7001 AB7001 AB7002 AB7002 AB7002 AD7002 AD7002	 AB7001 Baud rate 125-500 kbi/s DeviceNet 2.0 adapter ODVA.Group 2 only server Serial sub-network baud rate configurable up to 57.6 kbi/s Optically isolated DeviceNet interface Max 512 bytes input & 512 bytes output data BeviceNet supported features: I/O Slave Messaging - Bit Strobe, Polling, Cyclic & Change of State Supports FLASH field upgrades Echelon Smart Transceiver for better immunity from magnetic & high-frequency common mode noise Amount and type of network variables (SNVT's) and ModBus Registers Up to 256 input and 256 output network variables Support for self installation LonMark objects and profiles supported Senal sub-network - Modbus RTU Senal sub-network - Modbus RTU 	 AB7001 AB7007 AB7003 Baud rate 125-500 kbit/s DeviceNet 2.0 adapter CDVA, Group 2 only server Serial sub-network baud rate configurable up to 57.6 kbit/s Gpically isolated DeviceNet interface Gpically isolated DeviceNet interface Max 512 bytes input & 512 bytes output data EherNet/IP level 2 I/O Server CIP(Common Interface Protocol) Transformer isolated Ethernet interface IT functions Dynamic Web Server, Email and FTP Supports FLASH field upgrades Supports FLASH field upgrades Supports FLASH field upgrades Supports retaining from spatic A high-frequency common mode noise Amount and type of network wanables (SNTTs) and MoBus Registers Support for self installation Supports FLASH field upgrades Supports for self installation Support for self installation Supports FLASH field upgrades Supports

Anybus® is a registered trademark of HMS Industrial Networks AB, Sweden, USA. Germany and other countries. Other marks and words belong to their respective companies. All other product or service names mentioned in a document are trademarks of their respective companies.

ine 680 Hel E. 07 (200). E 196/E 196 american All region reserve

ACP&D Limited

Units 6 & 9A, Charlestown Industrial Estate, Robinson Street, Ashton-under-Lyne, Lancashire, OL6 8NS.

Tel: +44 (0)161 343 1884 Fax: +44 (0)161 339 0650 e-mail: sales@acpd.co.uk Websites: www.acpd.com & www.acpd.co.uk





