

 **Anybus**[®]

CompactCom

**Compact plug-in communication modules
designed for industrial automation
applications**

- ▶ Profibus
- ▶ DeviceNet
- ▶ CANopen
- ▶ CC-Link
- ▶ Modbus-RTU
- ▶ Profinet IO
- ▶ EtherNet/IP
- ▶ Modbus-TCP
- ▶ Powerlink
- ▶ EtherCAT
- ▶ RS-232/485
- ▶ USB
- ▶ Bluetooth

Connecting Devices[™]

Designed to meet all network connectivity requirements, featuring low price, small size and easy integration. Take a closer look at Anybus CompactCom!

Anybus CompactCom (Anybus-CC) has been designed to meet modern network connectivity requirements, featuring low price, small size and easy integration. At the same time, Anybus-CC provides the performance and functionality required to meet the communication demands of HMI's, robot controllers, drives, valve blocks, instruments, scales and many more industrial products. Anybus-CC modules use the CompactFlash® form factor and connector. The module is completely covered by a robust plastic housing, which enables easy handling and installation at any time in the logistic chain between manufacturer and end customer.

Innovative design and functionality - providing optimal flexibility.

The growing use and fragmentation of Industrial Ethernet and Fieldbus communication makes it even more difficult to decide which networks to support when you release a new product. Is only Profibus enough for you or do you need to support several fieldbuses? What about Ethernet, which industrial versions will be the right choice? Should you have USB or RS-232? Will your customers ask for wireless like W-LAN or Bluetooth? Is there any new technology coming up?

Where do you intend to sell your product, which networks are used in different countries and different industries? What about conformance and certification?

There are many factors that need to be considered before selecting the right communication interface for your product. With Anybus-CC, you have full flexibility and can choose from a wide range of connectivity solutions for your product.

Gone are the days of a long and complex in-design for network connectivity. The flexibility of the Anybus-CC is unrivaled. You can choose between any fieldbus or industrial Ethernet module without having to make any hardware or software changes to your product. With its small size, low cost, standardized

interface and high performance, the Anybus-CC is the perfect choice to connect automation devices to almost any industrial network.

It can easily be integrated into automation devices such as PLC's, drives, robot controllers, weigh scales, HMI's, but thanks to its small size it is now also ideal for valve manifolds, motion and temperature controllers, sensors, I/O blocks and barcode readers, just to name a few applications.



With its unique CompactFlash® connection the Anybus-CC simply plugs into the host application.

Active and Passive modules provide a complete communication solution.

There are two versions of Anybus-CC modules available.

Active Modules: Handle the full protocol stack up to Layer 7, suitable for networks such as Profibus, EtherNet/IP or CC-Link. All necessary software and hardware is included on the active Anybus-CC modules and they can be interfaced through an asynchronous serial interface or via a parallel Dual-Port-Ram interface. Both interface alternatives support the same data exchange methods, functionality

and features. Active modules are based on the Anybus NP30 network processor featuring high data throughput and low power consumption.

Passive Modules: Handle basic communications tasks such as converting signal levels to electrical standards. They are suitable for RS-232, RS-485, USB and Bluetooth.



The Anybus-CC family includes, Fieldbus, Ethernet, Serial, USB and Wireless modules.

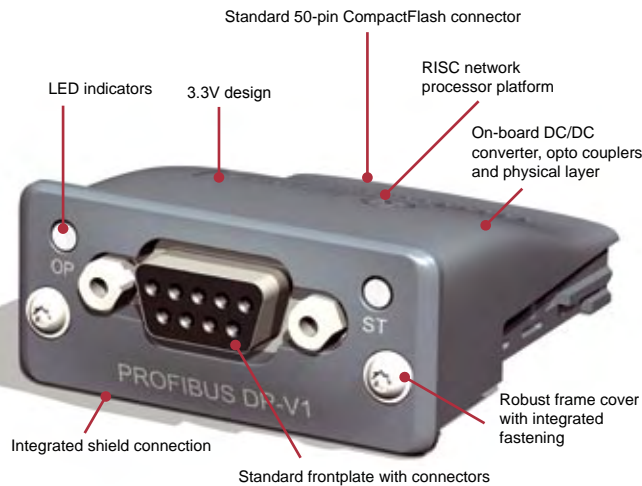
WHY USE ANYBUS-CC?

- Instant plug-in connectivity to all leading communication standards with only one development
- Standardized hardware and software interface for cyclic, acyclic and diagnostic functions independent of the network
- Smooth integration into the host application software
- Fast time to market, typically 1-3 months
- Parallel or serial application interface
- Continuous technology maintenance by HMS
- Robust housing, CompactFlash connection and innovative fastening, enables module insertion anywhere in the logistical chain
- High data throughput thanks to Anybus NP30 processor



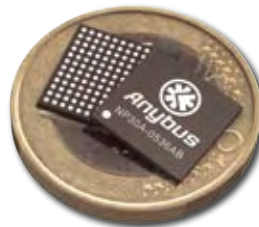
Available for:

- Profibus
- DeviceNet
- CANopen
- CC-Link
- Modbus-RTU
- Profinet
- EtherNet/IP
- Modbus-TCP
- Powerlink
- EtherCAT
- RS-232/485
- USB
- Bluetooth



Anybus Network Processor - NP30

Anybus-NP30 is a single chip high performance RISC network processor. It has been developed to be used firstly inside the Anybus-CompactCom as well as in future generations of Anybus products. The ASIC consists of a RISC processor including Profibus, Ethernet, CAN and serial interfaces as well as internal RAM and Flash memories. With its 10x10 mm BGA housing, the Anybus-NP30 is the smallest true single chip network processor for industrial communication!



KEY FEATURES

- Cost optimized communication modules for nearly all industrial applications
- Supports all major Fieldbus Networks, Industrial Ethernet Protocols, RS232, RS485, USB and Wireless
- Plug-in CompactFlash® connection to host product
- Robust housing for easy handling and optimized logistics
- Low power consumption
- Very small and compact size
- All network hardware and software is integrated into the module
- On-board high performance RISC network microprocessor
- Parallel Dual Port Ram interface for maximum performance and data throughput
- Serial asynchronous interface with configurable baudrates
- Starterkit available including driver software and demo application
- IT functions - Dynamic Web server, FTP server and Email client on most Ethernet versions

Typical application examples




TECHNICAL SPECIFICATION

- Size: 52 x 50 x 22 mm (L x W x H)
2.04 x 1.97 x 0.86" (L x W x H)
- Integrated shield connection
- Power Supply: 3.3 V
- Operating temperature
-40 °C to + 70 °C
-40 °F to + 158 °F
- EMC Compliance: CE marked
- UL & cUL Compliance pending
- RoHS conformance
- Tested and verified for Fieldbus and Network conformance

Anybus-CC combines both performance and flexibility in one very small package. It is small enough to be used in I/O and valve blocks and its powerful enough for demanding PLC's, Drives and Controller applications. In short, it can provide your application with a flexible "option interface" giving you the choice to add fieldbuses, industrial Ethernet protocols, simple serial interfaces, USB, or even a wireless option for your product.

Network specific supported features - Anybus CompactCom

 <p>Profibus-DPV1-AB6200</p> <ul style="list-style-type: none"> Active module with serial and parallel application interface Complete Profibus-DP and DPV1 Slave Up to 244 bytes cyclic I/O data in each direction Additional acyclic parameter data Supports Master Class 1 & Class 2 access Galvanically isolated Profibus interface with auto baud rate detection 9.6 kbit/s - 12 Mbit/s Generic GSD-file provided 	 <p>DeviceNet - AB6201</p> <ul style="list-style-type: none"> Active module with serial and parallel application interface Complete DeviceNet Adapter Up to 256 bytes of I/O data in each direction CIP Parameter Object Support Explicit messaging Galvanically isolated DeviceNet interface with auto baud rate detection 125 - 500 kbits/s UCMM capable Change-of-state / Cyclic I/O / Polled I/O, Bit-strobed I/O Generic EDS file provided 	 <p>CANopen - AB6202</p> <ul style="list-style-type: none"> Active module with serial and parallel application interface Complete CANopen Slave Up to 32 TPDO's & 32 RPDO's (Corresponds to a total of 256 bytes of Process Data in each direction) Additional SDO acyclic parameter data Galvanically isolated CANopen interface with auto baud rate detection 10 - 1000 kbits/s Generic EDS file provided 	 <p>Profinet IO - AB6215</p> <ul style="list-style-type: none"> Active module with serial and parallel application interface Profinet IO Real time functions Up to 256 bytes of I/O data in each direction Support for acyclic record data 100 Mbit/s full duplex Ethernet TCP/IP socket interface FTP server and Dynamic Web server with SSI support Available Q2-Q3 2007 Profinet IRT planned 	 <p>Modbus-TCP- AB6213</p> <ul style="list-style-type: none"> Active module with serial and parallel application interface Complete Modbus-TCP server Up to 4063 bytes parameter data Up to 256 bytes of I/O data in each direction Transformer isolated Ethernet interface 10/100 Mbit full duplex TCP/IP socket interface FTP server and Dynamic Web server with SSI support
 <p>EtherNet/IP-AB6214</p> <ul style="list-style-type: none"> Active module with serial and parallel application interface Complete EtherNet/IP Adapter CIP Parameter Object Support Explicit and implicit messaging Transformer isolated Ethernet interface 10/100 Mbit full duplex TCP/IP socket interface FTP server and Dynamic Web server with SSI support Generic EDS-file provided 	 <p>PowerLink-AB6210</p> <ul style="list-style-type: none"> Active module with serial and parallel application interface Complete Powerlink node Parameter object support Transformer isolated Ethernet interface 100 Mbit full duplex Dual RJ-45 connector TCP/IP socket interface FTP server and Dynamic Web server with SSI support Planned 2008 	 <p>EtherCAT-AB6216</p> <ul style="list-style-type: none"> Active module with serial and parallel application interface Complete EtherCAT node Supporting CANopen communication objects Transformer isolated Ethernet interface 100 Mbit full duplex Dual RJ-45 connector TCP/IP socket interface FTP server and Dynamic Web server with SSI support Planned 2008 	 <p>CC-Link - AB6211</p> <ul style="list-style-type: none"> Active module with serial and parallel application interface Complete CC-Link Slave supporting versions 1.10 & 2.0 Up to 128 I/O points - 32 words Number of occupied stations: 1-4 Support profiles for a "Remote Device" Galvanically isolated CC-Link interface with auto baud rate detection 156 kbit/s -10 Mbit/s Generic CSP file provided Planned 2007 	 <p>Modbus-RTU-AB6203</p> <ul style="list-style-type: none"> Active module with serial and parallel application interface Complete Modbus-RTU Slave Up to 256 bytes of I/O data in each direction Galvanically isolated Modbus-RTU interface (RS-232/485) with baud rates 1,2 - 115,2 Kbit/s Additional Modbus-ASCII functionality
 <p>RS-232 - AB6207</p> <ul style="list-style-type: none"> Passive module with serial application interface Physical layer converter for the RS-232 communication standard Supports baud rates up to 250 kbit/s No configuration necessary, since the module acts only on the physical layer Galvanically isolated RS-232 interface 	 <p>RS-485 - AB6208</p> <ul style="list-style-type: none"> Passive module with serial application interface Physical layer converter for the RS-485/422 communication standard Supports baud rates up to 10 Mbit/s No configuration necessary, since the module acts only on the physical layer Galvanically isolated RS-485/422 interface 	 <p>USB - AB6209</p> <ul style="list-style-type: none"> Passive module with serial application interface Physical layer converter for USB communication standard (USB 1.1 & USB 2.0 full speed) Supports 1 and 2 Mbit/s USB communication speed The baud rate is set from the host computer side Software drivers available 	 <p>Bluetooth</p> <ul style="list-style-type: none"> Passive module with serial application interface Physical layer converter for Bluetooth communication standard Planned 2008 	 <p>Starterkit</p> <p>The StarterKit provides a quick and simple way to test the Anybus-CC</p> <p>A serial hardware adapter for connection to PC (The adapter can be used for test setup in PC environment and for software download to the CompactCom)</p> 

Customized versions for specific requirements available on request - Contact your nearest HMS office

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