



CompactCom

Compact plug-in communication modules
designed to connect automation devices to
industrial networks

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

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 a CompactFlash® based connector with an innovative fastening mechanism. 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 development effort 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 and HMI's. Due to its small size it is 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® based connection the Anybus-CC simply plugs into the host application.

Active and passive modules build a complete communication solution.

Two versions of Anybus-CC modules are 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 communication 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.

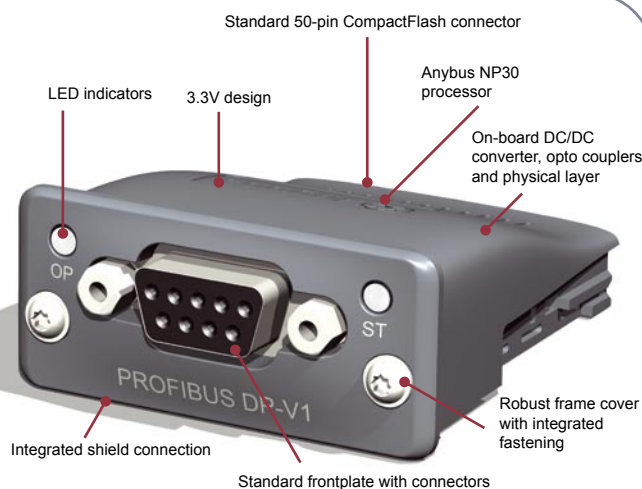
WHY USE ANYBUS-CC?

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



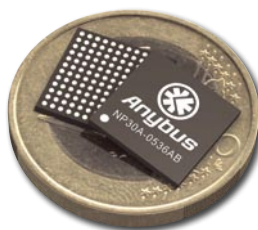
Available for:

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



Anybus NP30 network processor

Anybus NP30 is a single chip high performance RISC network processor. It has been optimized to be used in the Anybus CompactCom as well as in customized versions of the Anybus modules. NP30 consists of a RISC processor including Profibus, Ethernet, CAN and serial interfaces as well as internal RAM and Flash memories. With its 10x10 mm (0.4x0.4 in) BGA housing, the Anybus NP30 is the smallest true single chip network processor for industrial communication.



Typical application examples



Anybus CompactCom combines both performance and flexibility in one very small package. It is small enough to be used in I/O and valve blocks and it's 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 to your product.



KEY FEATURES

- Cost optimized communication modules for nearly all industrial applications
- Supports all major fieldbus networks, industrial Ethernet protocols, RS-232, RS-485, USB and wireless
- Plug-in CompactFlash® based 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 E-mail client on most Ethernet versions

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
- UL & cUL compliance
- RoHS conformance
- Tested and verified for fieldbus and network conformance

Network specific supported features - Anybus CompactCom

 Profibus-DPV1-AB6200 <ul style="list-style-type: none"> Active module with serial and parallel application interface Complete Profibus-DP and DPV1 slave Up to 244 byte 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 	 DeviceNet - AB6201 <ul style="list-style-type: none"> Active module with serial and parallel application interface Complete DeviceNet adapter Up to 256 byte of I/O data in each direction CIP Parameter Object Support Galvanically isolated DeviceNet interface with auto baud rate detection 125 - 500 kbit/s UCMM capable Change-of-state / Cyclic I/O / Polled I/O, Bit-strobed I/O, Explicit messaging Generic EDS file provided 	 CANopen - AB6218 <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 byte of process data in each direction) Additional SDO acyclic parameter data Galvanically isolated CANopen interface with auto baud rate detection 10 - 1000 kbit/s Generic EDS file provided 	 Profinet IO - AB6215 <ul style="list-style-type: none"> Active module with serial and parallel application interface Profinet IO real time functions Up to 256 byte of I/O data in each direction Support for acyclic record data Transformer isolated interface 100 Mbit/s full duplex Ethernet TCP/IP socket interface FTP server, E-mail and dynamic web server with SSI support Available Q4 2007 Profinet IRT planned 	 Modbus-TCP - AB6213 <ul style="list-style-type: none"> Active module with serial and parallel application interface Complete Modbus-TCP server Additional acyclic parameter data Up to 256 byte of I/O data in each direction Transformer isolated interface 10/100 Mbit/s full duplex Ethernet TCP/IP socket interface FTP server, E-mail and dynamic web server with SSI support
 EtherNet/IP-AB6214 <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/s full duplex TCP/IP socket interface FTP server, E-mail and dynamic web server with SSI support Generic EDS-file provided 	 EtherCAT-AB6216 <ul style="list-style-type: none"> Active module with serial and parallel application interface Complete EtherCAT node Supporting CANopen PDO and SDO communication objects 100 Mbit/s full duplex with dual RJ-45 connectors Planned 2008 	 CC-Link - AB6211 <ul style="list-style-type: none"> Active module with serial and parallel application interface Complete CC-Link slave supporting versions 1.10 & 2.0 Support all 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 Available Q4 2007 	 Modbus-RTU-AB6203 <ul style="list-style-type: none"> Active module with serial and parallel application interface Complete Modbus-RTU slave Up to 256 byte 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 	 Bluetooth - AB6212 <ul style="list-style-type: none"> Passive module with serial application interface Physical layer converter for Bluetooth communication standard Completely transparent interface Bluetooth class 2 SPP compatible Wireless range up to 30 meters
 RS-232 - AB6207 <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 	 RS-485 - AB6208 <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 	 USB - AB6209 <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 Galvanically isolated USB interface 	 Without Housing <p>The family of Anybus-CC modules is also available without the grey plastic housing.</p> <p>Special mounting kits are available to fasten the module on a printed circuit board.</p> <p>Please contact your nearest HMS office for more information.</p>	 Starterkit <p>The StarterKit provides a quick and simple way to test the Anybus CompactCom modules. A serial hardware adapter is included for connection to a PC (The adapter can be used for test setup in PC environment and for software download to the Anybus CompactCom modules).</p> 

Customized versions for specific requirements possible - Contact your nearest HMS office



About HMS

HMS Industrial Networks is the leading independent supplier of network technology for automation devices. HMS develops and manufactures solutions for interfacing automation devices to industrial networks.

Development and manufacturing takes place at the head office in Halmstad, Sweden. Local sales and development support for device manufacturers is provided by the branch offices in Chicago, Beijing, Karlsruhe, Milan, Mulhouse and Tokyo and by a global distribution network spanning 30 countries. HMS employs 138 persons of which 35 in R&D and reported sales of \$30 million in 2006. HMS is ranked in the top 500 fastest growing companies in Europe.

For more information please visit:

www.anybus.com



Sweden (HQ)

Tel: +46 (0) 35 17 29 00

Email: sales@hms-networks.com

www.anybus.com



Germany

Tel: +49 (0) 721 96472-0

Email: info@hms-networks.de

www.anybus.de



Italy

Tel: +39 (0)39 59662 27

Email: it-sales@hms-networks.com

www.anybus.it



France

Tel: +33 (0)3 89 32 76 76

Email: fr-sales@hms-networks.com

www.anybus.fr



USA

Tel: +1 312 829 0601

Email: us-sales@hms-networks.com

www.anybus.com



Japan

Tel: +81 (0) 45 478 5340

Email: jp-sales@hms-networks.com

www.anybus.jp



China

Tel: +86 (0) 10 8532 3183

Email: cn-sales@hms-networks.com

www.anybus.cn