

EtherCAT

EtherNet/IP

Modbus

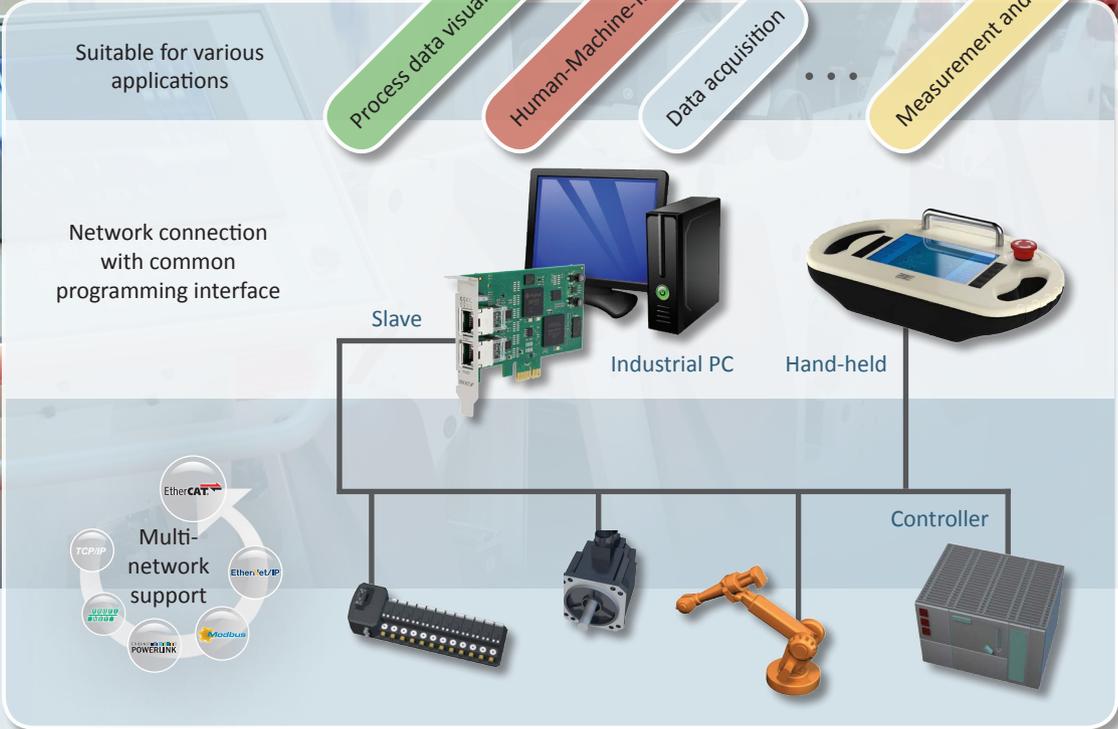
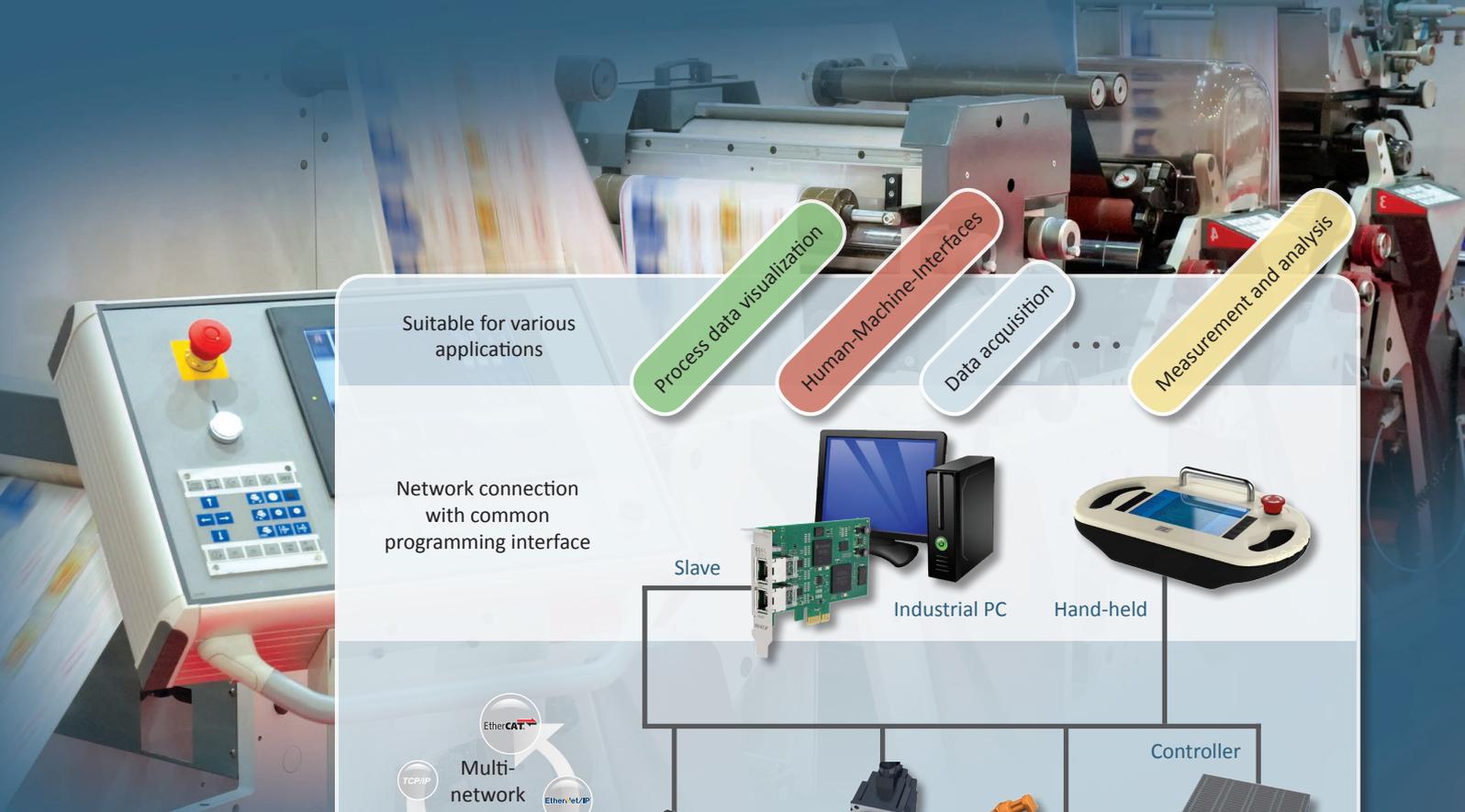
PROFI
NET

ETHERNET
POWERLINK

IXXAT[®]

IXXAT INpact

Versatile industrial Ethernet PC interface with multi-protocol support



Highlights

- ✓ One board for all common industrial Ethernet networks
- ✓ Easy switching between protocols through a standardized API
- ✓ Easy integration thanks to different form factors
- ✓ High performance for demanding real-time applications
- ✓ Future-proof solution based on proved IXXAT and Anybus technologies

IXXAT INpact allows you to connect a PC to any industrial network. It combines proven Anybus technology with years of IXXAT know-how in the area of PC interfaces. The result is an efficient PCIe card with multi-protocol support for numerous industrial Ethernet standards and a uniform application programming interface.

Industrial Ethernet connection with multi-protocol support

Designed to be used in many fields

Until now, it has been complicated to develop PC based applications for several industrial Ethernet standards since different interface cards and application programming interfaces had to be used for each protocol. IXXAT INpact simplifies this thanks to its protocol-independent solution that can be used in a wide range of applications.

- Process data visualization, e.g. within control stations or machines
- Human-Machine-Interfaces (HMI), mobile solutions based on Mini PCIe
- Data acquisition within test benches or test systems
- Measurement and analysis applications

With its low latency and deterministic real-time behavior, INpact is perfectly suited for demanding industrial applications. The galvanically isolated network interfaces decouple the industrial Ethernet network from the PC system, providing efficient protection against EMC issues and overvoltage.

INpact is available with **standard** or **low-profile** slot-brackets for compact industrial systems to enable the best possible integration. INpact will soon also be available in **PCI** and **mini PCIe** formats, enabling space-saving implementations for mobile or hand-held systems.

Multi-Protocol approach

INpact enables easy connection of PC based slave applications to various industrial Ethernet networks, such as

- PROFINET
- EtherNet/IP
- EtherCAT
- Powerlink
- Modbus TCP

The multi-network capability of INpact is based on HMS' proven Anybus CompactCom technology used within millions of automation devices globally. The network connection is made through a 2-port Ethernet interface (10/100 Mbit, RJ45), which also supports protocol specific switch functions – such as IRT for PROFINET, DLR for EtherNet/IP and Hub for Powerlink.

The efficient FPGA-based Anybus NP40 network processor handles the communication, providing all functions required to process the communication

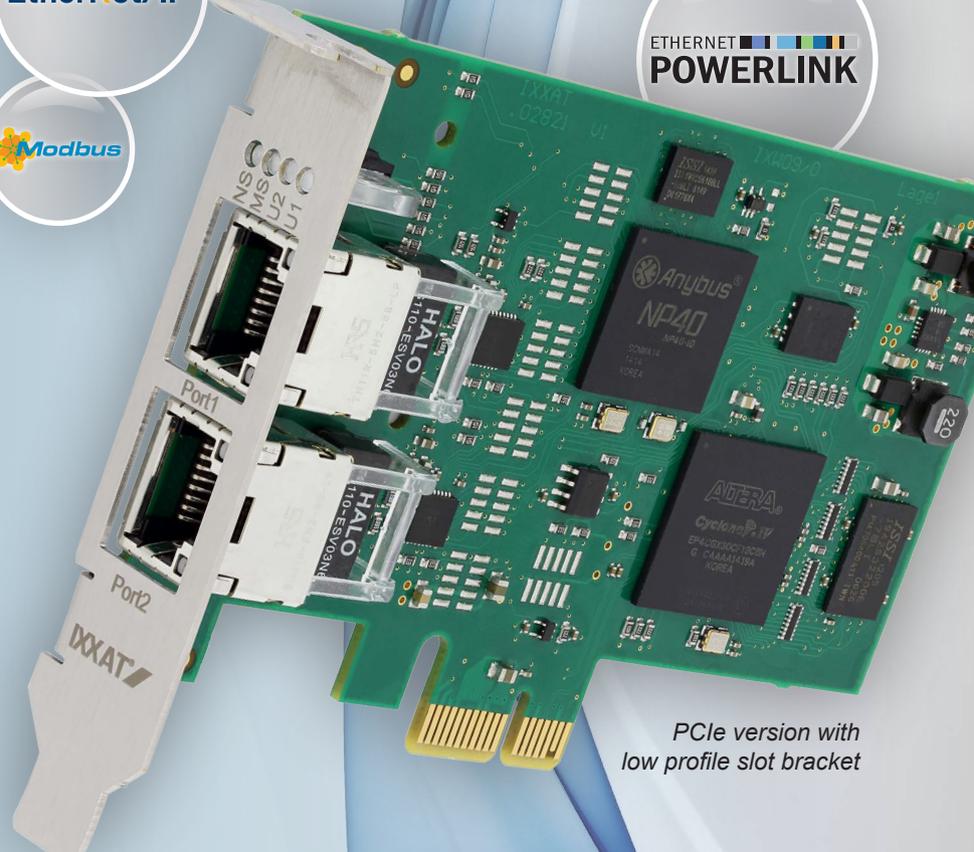
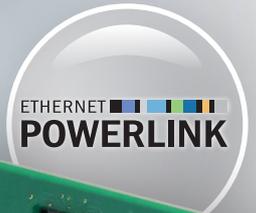
between the different Industrial Ethernet networks and the PC-based application.

Protocol alternation – on the fly

The INpact PC interfaces are available in two different versions: Firstly, as dedicated versions for each network with pre-installed network protocols, and secondly as a highly flexible and open version to which the desired industrial Ethernet protocol can be flashed. This feature allows easy switching between all available protocols in a quick and cost-efficient manner without any additional costs.



IXXAT INpact – based on the proven and trusted Anybus NP40 network processor



PCIe version with low profile slot bracket



Easy and protocol-independent programming

The INpact cards comes with a comprehensive C-API based driver package for Windows, enabling simple and rapid development of customer-specific applications. Thanks to the uniform application programming interface, it is possible to switch quickly between industrial Ethernet protocols without extensive programming, which leads to increased flexibility and a reduction in terms of development costs.

A driver for Linux is in the road map and real time operating systems such as RTX, Intime, VxWorks and QNX are supported upon request.

Technical data	
Field bus interface	Two Ethernet ports, 100/10 Mbit
PC interfaces	PCI Express single lane port (x1) according to PCI Express base specification, revision 1.1
Network handling	Anybus NP40
Power supply	Via PCIe socket (3.3 V / 12 V DC)
Current consumption	Typ. 200 mA / 3.3 V DC, 120 mA / 12 V DC
Form factor	Standard height / low profile PCI Express add-in card profile
Operating temperature range	0 °C to 70 °C Option: -40 °C to 70° C
Dimensions	64 x 105 mm
Weight	approx. 52 g

For more information
visit www.ixxat.com

HMS Industrial Networks – worldwide

HMS - Sweden (HQ)

Tel : +46 35 17 29 00 (Halmstad HQ)
Tel: +46 35 17 29 24 (Västerås office)
E-mail: sales@hms-networks.com

HMS - France

Tel: +33 368 368 034 (Mulhouse office)
Tel: +33 1 69 85 24 29 (Orsay office)
E-mail: fr-sales@hms-networks.com

HMS - Italy

Tel : +39 039 59662 27
E-mail: it-sales@hms-networks.com

HMS - United States

Tel: +1 312 829 0601
E-mail: us-sales@hms-networks.com

HMS - China

Tel: +86 10 8532 1188
E-mail: cn-sales@hms-networks.com

HMS - Germany

Tel: +49 721 989777-000
E-mail: ge-sales@hms-networks.com

HMS - Japan

Tel: +81 45 478 5340
E-mail: jp-sales@hms-networks.com

HMS - Denmark

Tel: +45 35 38 29 00
E-mail: dk-sales@hms-networks.com

HMS - India

Tel: +91 20 2563 0211
E-mail: in-sales@hms-networks.com

HMS - UK

Tel: +44 1926 405599
E-mail: uk-sales@hms-networks.com