

INpact CE Slave PCIe

Versatile industrial Ethernet PC interface with multi-protocol support

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 **Common Ethernet** variant provides a common platform for various industrial Ethernet protocols, like PROFINET, EtherNet/IP, Modbus-TCP, EtherCAT and Powerlink. The communication software for the selected network can easily be downloaded to the interface.



FEATURES AND BENEFITS

BENEFITS

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

GENERAL ETHERNET INTERFACE OPERATION – FEATURES

- Two Ethernet ports with Ethernet RJ45 connectors
- 10/100 Mbit, full/half duplex operation
- Web server with customizable content
- FTP server
- E-mail client
- JSON functionality
- Server Side Include (SSI) functionality
- Transparent Socket Interface

More information about the special features for PROFINET, EtherNet/IP, Modbus-TCP, EtherCAT and Powerlink can be found on the protocol specific INpact pages...

HOW IT WORKS



Multi-Protocol approach

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

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

The software for the various protocols can easily be downloaded to the interface. This highly flexible approach allows easy switching between all available protocols in a quick and cost-efficient manner without any additional costs.

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.

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 – and with drivers for Linux. 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.

Operating systems such as RTX, Intime, VxWorks and QNX are supported upon request.

TECHNICAL SPECIFICATIONS

	INpact CE Slave PCIe Standard/Low Profile	INpact CE Slave PCIe Mini	INpact CE Slave M.2
Field bus interface	Two Ethernet ports, 100/10 Mbit	Two Ethernet ports, 100/10 Mbit	Two Ethernet ports, 100/10 Mbit
PC interfaces	PCI Express single lane port (x1) according to PCI Express base specification, revision 1.1	PCI Express single lane port (x1)	PCI Express single lane port (x1)
Network handling	Anybus NP40	Anybus NP40	Anybus NP40
Power supply	Via PCIe socket (3.3 V / 12 V DC)	Via PCIe (3.3 V)	Via PCIe (3.3 V)
Current consumption	Typ. 270 mA / 3.3 V DC, 110 mA / 12 V DC	Typ. 600 mA / 3.3 V DC	Typ. 600 mA / 3.3 V DC
Form factor	Standard height / low profile PCI Express add-in card profile	Full Mini Card form factor	M.2 2260 (Key B-M)
Operating temperature range	0 °C to 70 °C; Option: -40 °C to 70° C	-40 °C to 60 °C	-20 °C to 60 °C
Galvanic isolation	1,500 Vrms	1,500 Vrms	1,500 Vrms
Dimensions	64 x 105 mm	30 x 50.95 x 12 mm (with cable)	22 x 60 x 12 mm (with cable)
Weight	approx. 53 g	approx. 48 g (only interface with connected cable)	approx. 25 g (only interface with connected cable)
Certification	CE, FCC	CE, FCC	CE, FCC

TECHNICAL SERVICES

Getting Started Support

We offer our customers support via phone, e-mail and Teamviewer in getting started the quickest way possible. This includes assistance in installation of the INpact PC card and driver, explaining the included programming examples, and giving an introduction to process data mapping and PLC configuration.

Additional Support

Extended support such as mapping process data, detailed introduction to the sample code, etc. can be offered on an hourly base as general technical service.

CONTENT OF DELIVERY

- Ixxat INpact PC board (Mini and M.2 version with additional bus interface board, cable and mini bracket)
- Product CD with firmware for all supported industrial Ethernet protocols
- Windows, Linux and INtime driver software
- Manual

File	Version	Size	Read online
------	---------	------	-------------

Order Information

Product name	Supported protocol	Order number
INpact CE Slave PCIe Standard Profile	Common Ethernet	1.01.0320.20110
INpact CE Slave PCIe Mini with connection cable (150 mm), bus coupling unit and mini bracket	Common Ethernet	1.01.0340.20151

INpact CE Slave M.2 with connection cable (150 mm), bus coupling unit and mini bracket	Common Ethernet	1.01.0342.20151
Connection cable (300 mm) for INpact PCIe Mini or M.2		1.04.0340.00001

* this product variant is not recommended for new developments

Copyright © 2020 HMS Industrial Networks - All rights reserved.

