#### W&I connects

Interfaces for TCP/IP, Ethernet, RS-232, RS-485, USB, 20mA, glass and plastic fiber optic cable, http, SNMP, OPC, Modbus TCP, I/O digital, I/O analog, ISA, PCI



Data sheet

# PCI Express Card 2x RS232/RS422/RS485, 1kV isolated



Article no.: 13631 EUR 248.00

\*Net price for commercial users

## Two additional serial ports on the PC

The 13631 PCI Express Card provides two selectable serial RS232/RS422/RS485 interfaces with 1kV galvanic isolation.

## **Properties**

## Interfaces:

- 2x RS232/RS422/RS485 interfaces
- 1x 32-bit PCI bus
- · Galvanic isolation between the ports
  - Isolation voltage 1kV DC

## Management and connectivity:

- UART with 128-byte FIFO and DMA capability for relieving the CPU
- Compact "x1" plug-in card for any PCI Express slots
- Compatible with PCI Express Standard 1.1 and PCI Power Management Standard 1.2
- · Driver support for:
  - Windows Desktop: NT, 2000, XP, Vista, 7, 8, 10, 11
  - Windows Server: 2003, 2008, 2008R2, 2012, 2016, 2019, 2022
  - Linux: Ubuntu, Suse, Debian, .....

## Standards & more

- . Conforms to standards both in office and industrial environments:
  - High noise resistance per EN 61000-6-2
  - Low noise emission per EN 55032:2015 + A1 Cl. B, EN 61000-3-2 & EN 61000-3-3
- 5 year guarantee



Wish for something!

Your suggestions for improvement and additions

## Worth knowing

PCI Express has almost completely replaced the long-in-the-tooth PCI bus system in current PC designs. There are still PC motherboards which offer slots for both systems, but due to cost and performance considerations current boards are equipped almost exclusively with PCI Express slots.

PCI Express is not a traditional PC bus system in which all plug-in cards are in parallel with the majority of bus lines. PCI Express is rather a star type wiring technique using a point-to-point connection between the PC and plug-in card to allow significantly greater transmission speeds than a bus solution with parallel wired slots would be able to process.

Data transmission to the plug-in cards in PCI Express is serial using differential wire pairs, so-called "lanes", which run at a

speed of 2.5 or 5 GB/s. For cards with high data throughput (graphics and network cards, hard drive controllers), multiple lanes are routed to a slot, whereas cards with less complexity get by easily with one lane.

The PCI Express standard enables solutions in which one (x1), four (x4), eight (x8) or 16 (x16) lanes are routed to a slot, with the connectors differing in the mechanical configuration, pin configuration and load capacity of the supply voltage.

The mechanical coding of cards and connectors ensures however that short cards can be easily used in long slots. For example, a x1 card can be used in a x4, x8 or x16 slot.

## **Technical data**

## Connections and displays:

PCIe port: PCIe 1.1 / "x1" connector

Serial port: 2x RS232-, RS422-, RS485 interfaces, selectable

9-pin SUB-D adapter

Operating modes: RS232, RS422

RS485 2-/4-wire with handshake RS485 2-/4-wire with automatic control

Maximum baud rate: RS232: 1Mbaud

RS422, RS485: 3Mbaud

Data format: any format

Signals: RS232: RxD, TxD, RTS, CTS, DTR, DSR, DCD, RI

RS422: RxD, TxD, CTS, DTR (RTS)

RS485: RxD, TxD

Handshake: No, RTS/CTS, Xon/Xoff

UART: Oxford OXPCIe954 with 128 bytes FIFO

Galvanic isolation: Isolation voltage min. 1kV DC

between PC and serial ports

Supply voltage: 3.3V DC, 12V DC

Current consumption: typ. 200mA @ 3.3V

typ. 100mA @ 12V

## Housing and other data:

Dimensions: 120 x 120mm (W x H)

Enclosure rating: IP00

Weight: approx. 100g

Ambient temperature: Storage: -40..+70°C

Operating: 0..+70°C

Permissible relative humidity: 5..95% RH, non-condensing

Scope of delivery: PCle card 2x RS232/RS422/RS485

Quick start manual

product CD with manual, German/English

<sup>\*</sup> Our offering is intended only for commercial users. We will be happy to refer private end customers to trading partners through whom our products can be purchased.



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