

2-port modular RS-232/422/485/20mA PCI-interface board, with optical isolation

- Can be configured as RS232, RS422, RS485 with/without optical isolation, 20 mA current loop (active/passive) with optical isolation through separate MX-modules
- Programmable transfer rate up to 115 kBaud (1 MBaud optionally)
- Automatic module identification
- Automatic addressing through BIOS
- 128 Byte FIFO buffer for sending and receiving data
- Common interrupt
- Automatic transmitter control for RS485
- 2 Sockets for MX-modules, modular structure
- for 3,3V or 5V PCI-Bus
- Standard drivers for Windows XP/2000, Linux 2.4.2 drivers on request

Description:

The 2-port serial interface can be configured through modules in the following modes: RS232, RS422, RS485 (with or without optical isolation) and current loop with optical isolation. The optical isolations allow a protection of up to 1000V for the use in noisy environments where earth loops can occur. The I/O lines are protected against short circuits, fast transients, electrostatic discharge and high-frequency EMI.



Application:

- Data acquisition
- Industrial serial communication
- Industrial process control
- SPS-interface

Specification:

Mode: RS-232/ 422/ 485/ 20mA Current Loop through separate MX-modules
 Transmission mode: Asynchronous, full or half duplex (MX-modules)
 Addressing: Automatic through BIOS
 Memory: 128-byte FIFO buffer for transmitter and receiver
 Transfer rate: prog. up to 115.2 kBaud
 Protocol: 5, 6 or 8-Bit character 1, 1.5 or 2 stop bits
 Parity: even, odd, none, mark, space
 Interrupt lines: Automatic configuration through BIOS
 Optical isolation: 1000V (MX-modules)

NOISE IMMUNITY:

Test level:
 ESD: 4 kV Fields: 10 V/ m
 Burst: 4 kV
 Conducted radio interferences: 10 V

PHYSICAL AND ENVIRONMENTAL CONDITIONS:

Dimensions: 151x 99 mm

System bus: PCI 32-Bit
 3.3V/ 5V Spec. 2.2

Operating voltage: +5 V +/- 5% from PC
 Current consumption: 160 mA typ.
 Front connector: 2x9pol.SUB-D male
 Temperature range: 0°C to +60°C

Order information:

APCI-7420-3

2-port serial interface for MX-modules, PCI-bus (without modules)

MX-MODULE:

MX-232-G

RS-232 modul with optical isolation

MX-232

RS-232 modul

MX-422-G

RS-422 modul with optical isolation

MX-485-G

RS-485 modul with optical isolation

MX-TTY

20 mA Current Loop modul (active/passive) with isolation