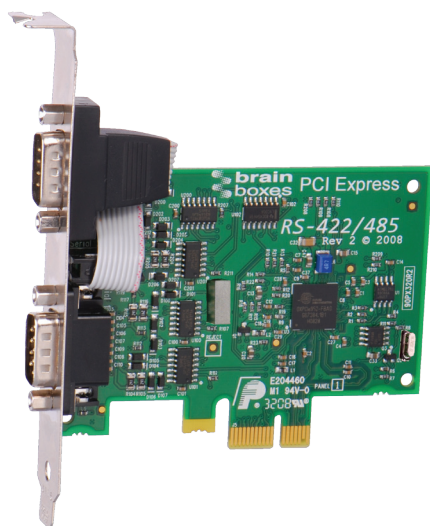


PCI Express RS422/485 Range Summary

CONNECT, CONFIGURE, CONTROL YOUR SERIAL DEVICES



Range Description

PCI Express is the latest connectivity standard within PCs. It is based on the existing PCI bus, but is faster and requires less power. PCI Express (PCIe) slots have replaced PCI slots within desktop PCs.

RS422 Standard: RS422 allows one transmitter and up to 10 receivers with data transmitter rates up to 10 megabits per second for distances up to 40 feet and up to 100 Kilobits per second for distances up to 4000 feet (1219 metres). To achieve good long distance noise immunity, 2 wires are used to carry each signal, configured as a twisted pair of cables. The TXD pair and RXD pair are used to carry the data whilst the RTS pair and CTS pair lines are used for handshaking. Thus 2 twisted pairs are used without handshaking and 4 twisted pair cable is used with handshaking both these schemes allow full duplex data communications.

RS485 Standard: RS485, based on the RS422 standard allows up to 32 driver/receivers pairs on a party line data bus. Whilst only one of these should be transmitting data at any time, the rest can all simultaneously listen to the data. Handshaking is performed by software protocol. Two twisted pairs form a full duplex system. Often only one twisted pair cable is used as the TXD and RXD lines are tied together; this is known as half duplex mode. Traditionally, the RTS signal is used as the party line control to tristate the PC's transmitter, but in multi-tasking operating systems like Windows or Linux the only reliable method is hardware autogating. Brainboxes RS422/485 products implement a state of the art autogating circuit thus ensuring error free communications in half duplex configurations.

Features across the range

- Max Baud rate: 921,600
- Fits any PCIe slot
- FIFO buffer per port: 128/256 byte (1-4 port cards), 32 byte (8 port cards)
- Plug & Play
- Autogating for automatic turnaround of transmit enable in RS485 half duplex mode - hassle free operation

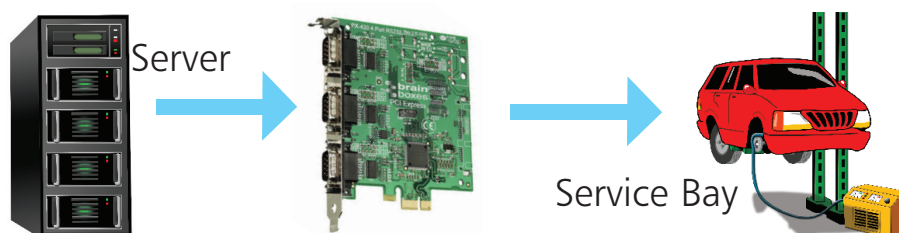
PCI EXPRESS SERIAL CARDS	PORTS	STANDARD CODE	LOW PROFILE CODE
PCIe 1xRS422/485 1MBaud	1 x 9 pin	PX-324	PX-320
NEW PCIe 1xRS422/485 Opto Isolated 1MBaud	1 x 9 pin	PX-387	PX-376
PCIe 2xRS422/485 1MBaud	2 x 9 pin	PX-313	
NEW PCIe 2xRS422/485 Opto Isolated 1MBaud	2 x 9 pin	PX-310	
PCIe 4xRS422/485 1MBaud	4 x 9 pin	PX-346*	

Our PCI Express Range has Microsoft Signed Drivers for the following:

- Windows 7
- Windows Server 2008
- Windows Vista
- Windows Server 2003
- Windows XP



Example Applications



Brainboxes Ranges



Ethernet to Serial

- Simple, instant cable replacement providing network integration
- Retain existing software applications on your network and connect from anywhere in the world
- Web-page configuration & RFC2217 compliant interface for non-Windows users
- LED status indication
- Autogating for automatic turn around of transmit enable in RS485 half duplex mode - hassle free operation
- IP30 rated rugged metal enclosure with integrated wall mount & optional DIN rail



USB to Serial - Industrial

- High retention USB connector for secure connections
- Plug & Play
- Fit any USB port
- Fantastic, proven, robust Boost software for excellent application compatibility
- IP30 rated rugged metal enclosure
- Includes 1m USB cable



USB to Serial - Desktop

- Powered by USB port - no external power supply required
- Plug & Play
- Fit any USB port
- Fantastic, proven, robust Boost software for excellent application compatibility
- Includes 0.25m USB cable (Type A plug to Type A receptacle)



ExpressCard

- New generation of I/O expansion for Notebooks
- Works in both 34 & 54mm slots
- User friendly form factor, convenient and rugged for notebook users
- High speed ExpressCards with excellent Plug-n-Play experience
- One & two port RS232 & RS422/485 products
- PCIe software & LPT Printer Port versions available
- Also available with PCMCIA Adapter



PCMCIA

- Use in tablet, laptop and Pocket PCs
- Robust connectivity
- Plug & Play Installation
- Option of secure or removable cable
- High speed connection up to 921,600 Baud
- One & two port RS-232 & RS422/485 products
- Also available in ExpressCard



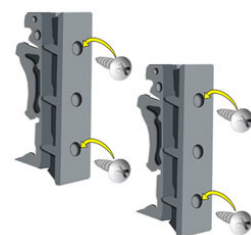
Bluetooth

- True wireless cable replacement
- Class 1 & 2 devices - 10 to 30 metres
- RS232 Converter, on board software that also works with dumb devices
- Other Bluetooth products available:
 - Compact Flash
 - PCMCIA
 - Bluetooth RS232 Module
- Can be powered by device
- PC and Device connectivity



uPCI

- Use in PCs and Servers
- True serial connectivity provides robust connection
- Universal - both 3.3 & 5V slots
- 1, 2, 3, 4 & 8 port RS-232 & RS422/485 products
- LPT Printer Port, Low Profile & Full Height versions available
- Opto Isolated versions available
- Powered EPOS included in range
- Also available in PCI Express



Accessories

- DIN rail kits available for 2, 4 & 8 port Ethernet to Serial and USB to Serial devices
- Cables for multiple product ranges - fully RoHS compliant
- Power supplies available for UK, Europe and USA

Connect, Configure, Control Your Serial Devices

Company & Product Accreditations



Our in-house Research and Development and Manufacturing facilities also provide "Custom Design, Perfect Fit" solutions.

Brainboxes Corporate Statement - From concept to customer your serial connectivity needs worldwide - solved!