brainboxes Product Guide

Brainboxes is an established UK designer and manufacturer of data and I/O connectivity products.

Our solutions give users simple, reliable communication and control of their equipment globally.

Our team delivers direct friendly expert support at every step of your project to give you exactly what you want

Contents

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Industrial Ranges

Process, control and automation in the palm of your hand. Designed for the factory floor.

Industrial Ethernet to IO Devices (-30ºC to +80ºC, -22ºF to +176ºF Temperature range)

Ethernet to 16 Digital Inputs	ED-516
Ethernet to 16 Digital Outputs	ED-527
Ethernet to 8 Digital Inputs + 4 Relays	ED-538
Ethernet to 8 Digital Inputs + 8 Digital Outputs	ED-588
Ethernet to 4 Digital IO & RS232/422/485 Serial Port & Switch	ED-504
Ethernet to 8 Analogue Inputs + RS485 Gateway	ED-549

Industrial Ethernet to Serial Devices (-30ºC to +80ºC, -22ºF to +176ºF Temperature range)

Ethernet to Serial Adaptor 1 Port RS232/RS422/RS485	ES-511
Ethernet to Serial Adaptor 2 Port RS232/RS422/RS485	ES-522
Ethernet to Serial Adaptor 1 Port RS232/RS422/RS485 Galvanic Isolation	ES-551
Ethernet to Serial Adaptor 1 Port RS232/RS422/RS485 Galvanic Isolation with Ethernet Switch	ES-571

Industrial Ethernet Switches (-40ºC to +80ºC, -40ºF to +176ºF Temperature range)

Ethernet 4 Port Switch	SW-504

Industrial Ethernet to I/O
Compact I/O devices with relay and Serial options

<u>Industrial Ethernet to IO Devices</u> (-30ºC to +80ºC, -22ºF to +176ºF Temperature range)

Ethernet to 16 Digital Inputs	ED-516
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Ethernet to 8 Analogue Inputs	ED-549
Ethernet to 8 Analogue Outputs	ED-560
Ethernet to 4 RTD Inputs	ED-582
Ethernet to 8 Thermocouple Inputs	ED-593

Brainboxes' Easy Wire Feature:
Removable screw terminal blocks make installation easier and quicker
Colour coded blocks and ports prevents incorrect connection
Numbered Pins simplifies wiring and removes confusion

Ethernet to I/O
Compact I/O devices with relay and Serial options

<u>Screw Terminal Ethernet to DIO Devices</u> (0ºC to +60ºC, +32ºF to +140ºF Temperature range)

Ethernet to 8 Digital Inputs/Outputs	ED-008
Ethernet to 4 Digital Inputs/Outputs + Ethernet to RS232	ED-004
Ethernet to 3 Relays + 3 Digital Inputs	ED-038
Ethernet to 4 Digital Inputs/Outputs + RS232 + Ethernet Switch	ED-204

Brainboxes' I/O offers more:
Brainboxes Ethernet IO software includes a suite of APIs (Application Programming Interfaces) designed from the ground up to allow simple integration into your system.
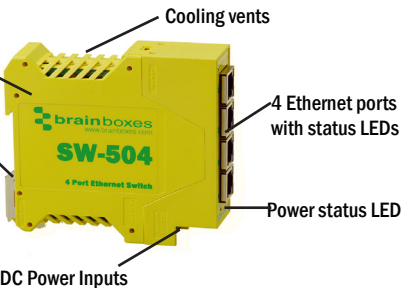
Ethernet Switches
Add more Ethernet ports and expand your network.

-40ºC to +80ºC, -40ºF to +176ºF Temperature range

Cooling vents

Integral DIN rail mount

4 Ethernet ports with status LEDs

Power status LED

+5V to +30V DC Power Inputs

<u>Industrial DIN mountable Ethernet Switch Devices</u> (-40ºC to +80ºC, -40ºF to +176ºF Temperature range)

Industrial Ethernet Switch 4 Port	SW-504
Industrial Ethernet Switch 8 Port	SW-508

<u>Screw Terminal Ethernet Switch Devices</u> (0ºC to +60ºC, +32ºF to +140ºF Temperature range)

Ethernet Switch 5 Port	SW-005

Industrial Ethernet to Serial
Send serial data over a network with features perfect for industry

Industrial Ethernet to Serial Devices (-30ºC to +80ºC, -22ºF to +176ºF Temperature range)

Ethernet to Serial Adaptor 1 Port RS232/RS422/RS485	ES-511
Ethernet to Serial Adaptor 2 Port RS232/RS422/RS485	ES-522
Ethernet to Serial Adaptor 1 Port RS232/RS422/RS485 Galvanic Isolation	ES-551
Ethernet to Serial Adaptor 1 Port RS232/RS422/RS485 Galvanic Isolation with Ethernet Switch	ES-571

Great Features
Extended Temperature Range: -30ºC to +80ºC/ 22ºF to +176ºF
Wide Range Redundant Dual Power Input: +5VDC to +30VDC
DIN Rail Mount: built in
Slim Shape: 22.6mm wide

Ethernet to Serial
Send serial data over a network no expertise required.

Ethernet to Serial Devices - 9 Pin D

Ethernet to Serial Adapter 1 Port RS232	ES-246
Ethernet to Serial Adapter 2 Port RS232	ES-257
Ethernet to Serial Adaptor 4 Port RS232	ES-701
Ethernet to Serial Adaptor 8 Port RS232	ES-279
Ethernet to Serial Adapter 1 Port RS422/485	ES-320
Ethernet to Serial Adapter 2 Port RS422/485	ES-313
Ethernet to Serial Adaptor 4 Port RS422/485	ES-346
Ethernet to Serial Adaptor 8 Port RS422/485	ES-842

Ethernet to Serial Devices Screw Terminal Blocks

Ethernet to Serial Adaptor 1 Port RS232	ES-020
Ethernet to Serial Adaptor 1 Port RS232 & 1 Port RS422/485	ES-357

PoE Ethernet to Serial
Power your Ethernet to Serial from your Ethernet cable

PoE Ethernet to Serial Devices - 9 Pin D

PoE Ethernet to Serial Adapter 1 Port RS232	ES-446
PoE Ethernet to Serial Adapter 2 Port RS232	ES-457
PoE Ethernet to Serial Adapter 1 Port RS422/485	ES-420
PoE Ethernet to Serial Adapter 2 Port RS422/485	ES-413

PoE the neat connection

Power over Ethernet products use a standard Ethernet cable to deliver both data and power in one connection.

It can be cheaper and easier to run just one cable giving simplicity and flexibility in installation.

You will need a PoE enabled network, which can easily be achieved with a PoE Injector or a PoE hub or switch.

USB to Serial
Get Serial ports using the worlds most popular interconnection standard

USB to Serial Adapter

Ultra Small Profile USB 1 Port RS232 Isolated	US-159
Ultra Small Profile USB 1 Port RS232 1MBaud	US-235
USB to Serial Adapter 1 Port RS232	US-101
USB to Serial Adapter 2 Port RS232	US-257
USB to Serial Adaptor 4 Port RS232	US-701
USB to Serial Adaptor 8 Port RS232	US-279
Ultra Small Profile USB 1 Port RS422/485 1MBaud	US-320
USB to Serial Adapter 1 Port RS422/485	US-324
USB to Serial Adapter 2 Port RS422/485	US-313
USB to Serial Adaptor 4 Port RS422/485	US-346
USB to Serial Adaptor 8 Port RS422/485	US-842

Haven't found what you are looking for?
Need something slightly different or
completely new?
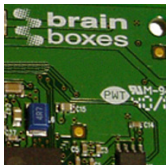
Talk to our experienced team about your custom build needs

Brainboxes are committed to innovation and product design. We are also commited to fullfilling the needs needs of our customers and supporting their vast range of applications.

We are happy to develop the specification of products to suit your needs and support you through the installation and roll our process so that your project runs smoothly.

As we design, manufacture and support our devices we have a unique expertise in one location that ensures an unparalleled ability to deliver what you demand and deserve.

To discuss your custom design needs e-mail: sales@brainboxes.com

Phone UK   +44 (0)151 220 2500
Phone USA   +1 855 958 2502

Custom Design

ExpressCards
Use in either 34mm and 54mm slots

PCIe ExpressCard Serial Adapter

PCIe ExpressCard 1 LPT Printer Port	XC-157
PCIe ExpressCard Serial Adapter 1 Port RS232	XC-235
PCIe ExpressCard Serial Adapter 1 Port RS232 and 1 Printer Port LPT	XC-475

ExpressCard Serial Adapter

ExpressCard Serial Adapter 1 Port RS232	VX-001
ExpressCard Serial Adapter 2 Port RS232 with detachable cable	VX-012
ExpressCard Serial Adapter 1 Port RS422/485	VX-023
ExpressCard Serial Adapter 2 Port RS422/485 with detachable cable	VX-034
ExpressCard 54MM SPACER	VX-056

PCMCIA
## The classic way of adding serial connectivity to laptops.

PCMCIA Devices

|	
PCMCIA 1 Port RS232 with detachable cable	PM-020
PCMCIA 1 Port RS232 with ruggedised integrated cable	PM-143
PCMCIA 2 Port RS232 with detachable cable	PM-010
PCMCIA 2 Port RS232 with ruggedised integrated cable	PM-132
PCMCIA 1 Port RS422/485 with detachable cable	PM-120
PCMCIA 1 Port RS422/485 with ruggedised integrated cable	PM-154
PCMCIA 2 Port RS422/485 with detachable cable	PM-121

Ruggedised PCMCIA cards have permanently attached cables for increased security.
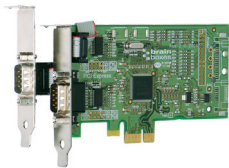
PCIe Express cards
Brainboxes offers an extensive range of PCI Express cards

PCI Express Serial Cards RS232	Standard Height	Low Profile
PCI Express Serial Card 1 Port RS232	PX-246	PX-235
PCI Express Serial Card 1 Port + 1 x RS232 Low Profile		PX-101
PCI Express Serial Card 2 Port RS232	PX-257	
PCI Express Serial Card 3 Port RS232	PX-431	
PCI Express Serial Card 4 Port RS232 Quad Cable 4 x 9 pin	PX-701	PX-260
PCI Express Serial Card 4 Port RS232 (3x9 pin ports + 1x9 pin port)	PX-420	
PCI Express Serial Card 8 Port RS232 DB9 Octo cable 8 x 9 pin	PX-279	

LPT Parallel Printer Port		
PCI Express Serial Card 1 Port RS232 with LPT Parallel Printer Port	PX-475	
PCI Express Serial Card Parallel Port Printer	PX-146	PX-157
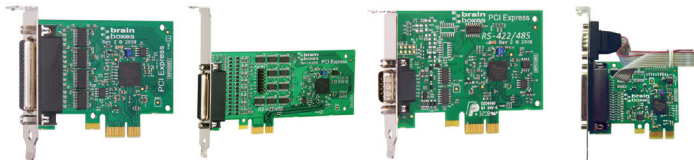
PCI Express Serial Cards RS422/485

PCI Express Serial Cards RS422/485	Standard Height	Low Profile
PCI Express Serial Card 1 Port RS422/485	PX-324	PX-320
PCI Express Serial Card 1 Port RS422/485 Opto Isolated	PX-387	PX-376
PCI Express Serial Card 2 Port RS422/485	PX-313	
PCI Express Serial Card 2 Port RS422/485 Opto Isolated	PX-310	
PCI Express Serial Card 4 Port RS422/485 Quad cable 4 x 9 pin	PX-346	PX-335
PCI Express Serial Card 4 Port RS422/485 Quad cable 4 x 9 pin Opto Isolation	PX-368	

Brainboxes PCI Express cards will fit in any
PCI Express slot - x1, x4, x8 & x16.

Power over serial options available
Contact sales@brainboxes.com for more information

PCI Express

uPCI
A range of PCI cards - the classic connection

PCI Serial Card	Standard Height	Low Profile
PCI Serial Card 1 Port RS422/485	UC-324	UC-320
PCI Serial Card 1 Port RS232 + 1 Port RS422/485	UC-357	
PCI Serial Card 2 Port RS422/485	UC-313	
PCI Serial Card 2 Port RS422/485 Opto Isolated	UC-310	
PCI Serial Card 4 Port RS422/485 Quad cable 4 x 9 pin	UC-346	
PCI Serial Card 4 Port RS422/485 Opto Isolated Quad cable 4 x 9 pin	UC-368	
PCI Serial Card 1 Port RS232	UC-246	UC-235
PCI Serial Card 2 Port RS232 Low Profile on cable		UC-253
PCI Serial Card 2 Port RS232	UC-257	UC-101
PCI Serial Card 3 Port RS232 (3x9 pin ports)	UC-431	
PCI Serial Card 4 Port RS232 (3x9 pin ports + 1x9 pin port)	UC-420	
PCI Serial Card 4 Port RS232 DB9 Quad cable 4 x 9 pin	UC-701	UC-260
PCI Serial Card 4 Port RS232 Opto Isolated Quad cable 4 x 9 pin	UC-083	UC-061
PCI Serial Card 8 Port RS232 DB9 Octo cable 8 x 9 pin	UC-279	

uPCI
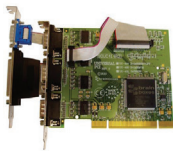
25 pin D connectors are an available option with all cable adaptors 1 to 8 ports, RS232 or RS422/485, low profile or standard height, and with or without cables.

PCI Cards with Parallel Printer Ports

	Standard Height	Low Profile
Parallel Port Printer PCI Card	UC-146	UC-157
PCI Serial Card 1 Port RS232 with LPT Parallel Printer Port Low Profile		UC-464
PCI Serial Card 2 Port RS232 with LPT Parallel Printer Port	UC-475	UC-203
PCI Serial Card 4 Port RS232 with LPT Parallel Port for Printer	UC-295	UC-263
PCI Serial Card 4 Port RS232 with LPT Parallel Port for Printer (3x9 pin ports + 1x9 pin port + 1 x 25 pin port)	UC-414	

Brainboxes offers a range of powered PoS cards that have +12V and +5V outputs and are jumper selectable with resettable fuse protection. We can also make ultra high speed cards up to 18 MegaBaud to order.

Contact Sales for more information:
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uPCI

International Accreditations

Brainboxes has achieved a number of industry and government recognised accreditations and standards for our products, our software and our company.

Here is just a selection, a full list can be found on our website or contact: quality@brainboxes.com

Lifetime Warranty

Our own in-house design and manufacturing gives us exceptional quality and reliability and the confidence to offer our customers lifetime warranty for all serial devices. Simply complete the online form to register.

www.brainboxes.com/lifetime-guarantee

Lifetime Technical Support

We pride ourselves on offering the industry's best technical support for free to our customers. When you sign up to our life time warranty you gain access to in depth support, covering all products over a wide range of operating systems and applications.

www.brainboxes.com/contact-support

Custom Options and Roll Outs

Let our experienced staff guide you through your tailor made brainboxes package.

www.brainboxes.com/sales-contact-form   sales@brainboxes.com

Support

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