

Product Guide



Brainboxes design and manufacture innovative industrial and IoT networking products

Our quality guaranteed products marry the robust hardware of industry with the possibilities of modern software and connectivity to provide you with solutions that are easy to use, highly configurable and extremely reliable

With our expertise available directly to you at every step of your project, Brainboxes offer the best lifetime support in the industry; all completely free



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Minimise Downtime, Speed Up Response Times, Maximise Profits



Industrial Edge Controller
8 DIO + RS232/422/485 + Wi-Fi + UPS + 2 Ethernet

BB-400

Lifetime Warranty

In-house design and manufacturing guarantees exceptional quality and the reliability to offer our customers free lifetime warranties

www.brainboxes.com/lifetime-guarantee



Lifetime Technical Support

We pride ourselves on offering the industry's best technical support for free to our customers. Sign up to our lifetime warranty and get expert support for life

www.brainboxes.com/contact-support

Custom Options and Roll-Outs

Our experienced sales team can guide you through a tailor-made Brainboxes package

www.brainboxes.com/sales-contact-form

Whilst our products come with everything you need to get started, additional accessories are available to purchase separately with no minimum order quantity

Power Supplies

DIN Rail Power Supply 24V 45W	PW-245
DIN Rail Power Supply 48VDC 96W	PW-301
PoE Splitter	PW-323
Adapter 12V 1.5A	PW-400
Adapter 5V 3A 2.1mm Screw Lock	PW-500
Adapter 5V 1.2A	PW-600
USB to 5 Pin Terminal Block Adapter	PW-650



Mounting Kits

DIN Rail kit 1 & 2 Port	MK-048
Wall Mount Kit 4 & 8 Port	MK-059
Snap In DIN Rail Clip 4 & 8 Port	MK-070
22.5mm Wall/Surface Clip	MK-081
22.5 mm Right Angle DIN Rail Clip	MK-092
20mm Spring Loaded DIN Rail Mount	MK-103
35mm Spring Loaded DIN Rail Mount	MK-114
3.5mm Pluggable Blocks	MK-588



Ethernet Switches



Industrial DIN-mountable Ethernet Switch Devices

Industrial Ethernet Switch 4 Port	SW-504
Industrial Ethernet Switch 5 Port	SW-505
Industrial Ethernet Switch 8 Port	SW-508
Hardened Ethernet Switch 5 Port	SW-705
Hardened Ethernet Switch 8 Port	SW-708

Light Industrial Ethernet Switch Devices

Ethernet Switch 5 Port	SW-005
Ethernet Switch 8 Port	SW-008

Provide additional Ethernet ports to get devices on the network: wide range of specifications to suit multiple applications in varied environments

Industrial Embedded Ethernet Switch Devices

Embedded Ethernet Switch 4 Port SW-104

Embedded Ethernet Switch 5 Port SW-105

Embedded Ethernet Switch 8 Port SW-108



Light/Industrial Gigabit Ethernet Switch Devices

Gb Ethernet Switch 5 Port SW-015

Embedded Gb Ethernet Switch 5 Port SW-115

Industrial Gb Ethernet Switch 5 Port SW-515

Hardened Gb Ethernet Switch 5 Port SW-715



Industrial PoE Ethernet Switch Devices

Embedded PoE Ethernet Switch 5 Port SW-125

Industrial PoE Ethernet Switch 5 Port SW-525

Hardened PoE Ethernet Switch 5 Port SW-725



Connect to machines, sensors, lights, controllers, conveyors and more...

- Ideal for monitoring production efficiency and productivity
- Digital or Analogue control and monitoring over Ethernet
- Supports Modbus TCP to connect and control PLCs
- Compatible with Windows and Linux
- A library of APIs to enable control of devices

Screw Terminal Ethernet to DIO Devices

(0°C to +60°C, +32°F to +140°F Operating 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





Industrial Ethernet to IO Devices

(-30°C to +80°C, -22°F to +176°F Operating 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 8 Analogue Inputs	ED-549
Ethernet to 4 Analogue Outputs	ED-560
Ethernet to 4 RTD Inputs	ED-582
Ethernet to 8 Thermocouple Inputs	ED-593



Extend over any distance

- Great for broadcast where Serial is standard
- Security applications
- Remote monitoring and control



Industrial Ethernet to Serial Devices (-30°C to +80°C, -22°F to +176°F
Temperature range)

1 Port RS232/RS422/RS485	ES-511
2 Port RS232/RS422/RS485	ES-522
1 Port RS232/RS422/RS485 Galvanic Iso	ES-551
1 Port RS232/RS422/RS485 Galvanic Iso & Switch	ES-571

Ethernet to Serial Devices – 9 Pin D

1 Port RS232

ES-246

2 Port RS232

ES-257

4 Port RS232

ES-701

8 Port RS232

ES-279

1 Port RS422/485

ES-320

2 Port RS422/485

ES-313

4 Port RS422/485

ES-346

8 Port RS422/485

ES-842



Ethernet to Serial Devices Screw Terminal Blocks

1 Port RS232

ES-020

1 Port RS232 & 1 Port RS422/485

ES-357



Power over Ethernet to Serial Devices – 9 Pin D

1 Port RS232

ES-446

2 Port RS232

ES-457

1 Port RS422/485

ES-420

2 Port RS422/485

ES-413





Get Serial ports using the world's most popular interconnection standard

USB to Serial Adapter

Ultra Small Profile USB 1 Port RS232 Isolated	US-159
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Ultra Small Profile USB 1 Port RS232 1MBaud	US-235
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USB to Serial Adapter 1 Port RS232	US-101
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USB to Serial Adapter 2 Port RS232	US-257
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USB to Serial Adapter 4 Port RS232	US-701
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USB to Serial Adapter 8 Port RS232	US-279
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Ultra Small Profile USB 1 Port RS422/485 1MBaud	US-320
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USB to Serial Adapter 1 Port RS422/485	US-324
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USB to Serial Adapter 2 Port RS422/485	US-313
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USB to Serial Adapter 4 Port RS422/485	US-346
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USB to Serial Adapter 8 Port RS422/485	US-842
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USB-C to serial adapters designed for modern devices; tablets, laptops and smartphones



USB-C to Serial Adapter

1 port RS-422/485 USB-C to Serial Adapter	US-720
1 Port RS-232 USB-C to Serial Adapter	US-735
2 port RS-232 USB-C to serial adapter	US-757
1 Port Isolated RS-232 USB-C to Serial Adapter	US-759

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

PCI Express Serial Cards RS232

1 Port RS232

Standard Low Profile

PX-246

PX-235

1 Port + 1 x RS232 Low Profile

PX-101

2 Port RS232

PX-257



3 Port RS232

PX-431

4 Port RS232 Quad Cable 4 x 9 pin

PX-701

PX-260

8 Port RS232 DB9 Octo cable 8 x 9 pin

PX-279



LPT Parallel Printer Port

1 Port RS232 with LPT Parallel Printer Port

PX-475

1 Parallel Printer Port

PX-146

PX-157

PCI Express Serial Cards RS422/485

1 Port RS422/485

Standard Low Profile

PX-324

PX-320

1 Port RS422/485 Opto Iso

PX-387

PX-376

2 Port RS422/485

PX-313

PX-303

2 Port RS422/485 Opto Iso

PX-310

4 Port RS422/485 Quad cable 4 x 9 pin

PX-346

PX-335

4 Port RS422/485 Quad cable 4 x 9 pin Opto Iso

PX-368

1 to 8 ports, RS232 or RS422/485, low profile or standard height, with or without cables

PCI Serial Card

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

PCI Cards with Parallel Printer Ports

	Standard	Low Profile
1 Port Parallel Printer PCI Card	UC-146	UC-157
1 Port RS232 with LPT Parallel Printer Port		UC-464
2 Port RS232 with LPT Parallel Printer Port	UC-475	UC-203

Contact Us

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Designed and manufactured in UK with global accreditations (where applicable)



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