

# ES-413 PoE ETHERNET TO SERIAL DEVICE SERVER

## Ethernet 2 Port RS422/485 Power Over Ethernet PoE

*CONNECT, CONFIGURE, CONTROL YOUR SERIAL DEVICES*



### Features

- 2 Port RS-422/485 with Power over Ethernet IEEE802.3af
- Ethernet to Serial Device Server
- Data rate from 110 to 1,000,000 baud
- User friendly interface, simple to use, powerful in operation
- Serial Port Tunnelling allows serial cable replacement over any distance, no software required
- Optional DIN rail mounting kit and stand alone power supply



### Description

Ethernet to Serial device server with Power over Ethernet providing access to two RS422/485 serial ports. Data transfer rates up to 1,000,000 baud, coupled with 1Mbit/s line drivers deliver uncompromising performance. Power over Ethernet PoE uses IEEE 802.3af standard, compatible with any PoE switch. Our ES range provides simple instant networked serial ports. RS485 - 1 twisted pair - half duplex configuration with autogating provides trouble free data transmission due to automatic control of data direction. A web interface allows secure configuration and control of the serial ports over a local network or the internet using any browser. For Windows our in-house designed 32 bit and 64 bit driver gives you local COM ports, retaining existing software applications and allowing you to connect across your network to remote devices just as if they were attached locally. Serial Port Tunnelling individually configurable allows serial cable replacement over any distance, no software required. You can access the device via TCP/IP sockets from any networked device like an Android tablet, PC or phone. On Windows OS TCP/IP sockets are handled by the Winsock API, this will differ on other OSs.

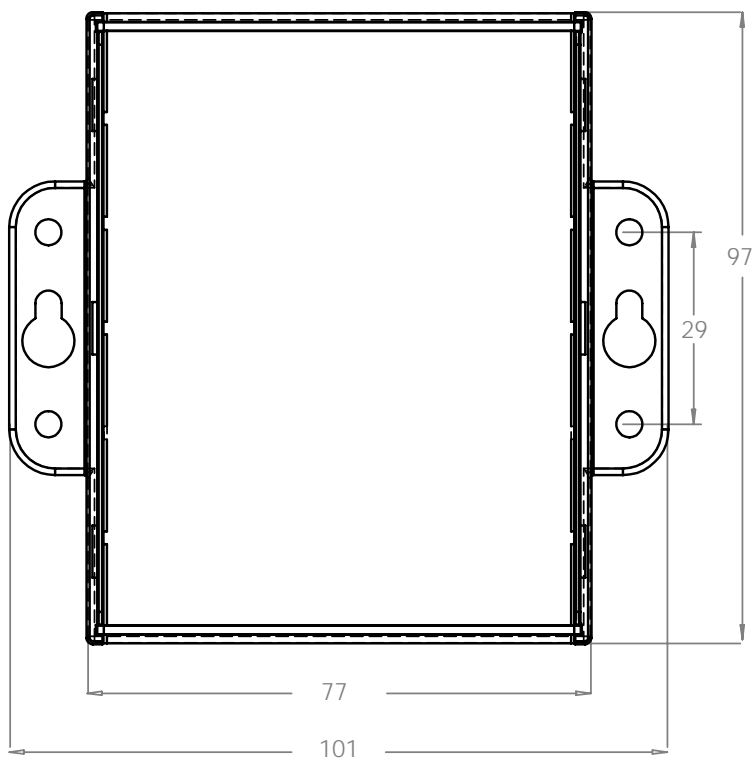
Extend your reach! Remote serial devices with local control. With Brainboxes industry renowned Lifetime Warranty and Lifetime Support!

### Example Application



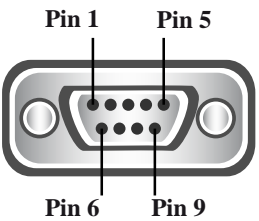
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## Box Information



Pin 1	TXD-
Pin 2	TXD+
Pin 3	RTS-
Pin 4	RTS+
Pin 5	GND
Pin 6	RXD-
Pin 7	RXD+
Pin 8	CTS
Pin 9	CTS+

RS422/485 Pinout (9 Pin)



## LED Information

Status LED	Green	Device Ready
	Flashing Yellow	Changing Settings
	Flashing between Red & Green	Querying IP
	Flashing Green/Red	User performing Hard Reset
	Flashing between Green & Red/Yellow	IP address diagnostic
Serial Port LEDs	Flashing between Green & Yellow	Initialization diagnostic
	Green light on	Port Open
	Flashing Green	Data RX / TX
Network LED	Green light on	Link Established
	Flashing Green	Data RX / TX

## Port

Ports	2 port RS422/485
Connector	DB9 Connector - 9 Pin Male
Power Input	Power Over Ethernet OR 5 - 30V DC input, reverse polarity protected
Power Consumption	2.15W

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## Port Settings - RS422/485

Baud Rate	From 110 - 1,000,000 1 MegaBaud
Data Bits	5,6,7 or 8
Parity	Odd, Even, None, Mark or Space
Stop Bits	1 or 2
Flow Control	RTS/CTS, XON/XOFF
Tx/Rx Modes	Full Duplex, Half Duplex Autogating - Hardware Autogating

## Port Settings - Ethernet

Data Rate	10/100 Mega bits/second
Cabling	Normal / Crossover auto-sensing (Auto-MDIX)
Power over Ethernet	Power Over Ethernet OR 5 - 30V DC input, reverse polarity protected IEEE 802.3af

## Environmental

Operating Temperature	0°C to +60°C / 32°F to +140°F
Ambient Relative Humidity	5 to 95% (non-condensing)
Housing	IP-30 rated case

## Software

Network Protocols	ICMP, IP, TCP, UDP, DHCP, BOOTP, Telnet, HTTP, RFC2217
Data Transfer Protocol	TCP
Configuration Options	Windows Utility, Web Interface
OS Compatibility	Communicate with Device over TCP from any OS / Microsoft Windows 8 32 bit 64 bit Editions / Windows Server 2012 / Microsoft Windows 7 32 bit 64 bit Editions / Windows Server 2008 32 bit 64 bit Editions / Windows Vista 32 bit 64 bit Editions / Fully RFC2217 compliant / Interface for other OS's & Linux

## Approvals

Industry Approvals	AEO C-TPAT Microsoft Certified Gold Partner WEEE RoHS EMC: CE TAA
Microsoft Approvals	Microsoft Certified Gold Partner
Microsoft Signed Drivers	Windows 8 32 bit 64 bit Editions Windows 7 32 bit 64 bit Editions



## Packing Information

Packaging	Quick Start Guide, Installation CD including manual, Microsoft signed drivers & utilities
Device	Ethernet 2 Port RS422/485 Power Over Ethernet PoE
Accessory Items	Available from Brainboxes : Optional Global Power Supply - PW-800, DIN-Rail Mounting Kit - MK-048
Packaged Weight	0.244 kg, 8.61 ounces
Packaged Dims	160x135x45 mm, 6.3x5.3x1.8 inches
UPC number	837324003789

# ES-413 Ethernet 2 Port RS422/485 Power Over Ethernet PoE

## Product Support

### Warranty Support

Lifetime - online registration required

Lifetime Web, Email and Phone Support from fully qualified, friendly staff who work in and alongside the Product Development Team



## Additional Information

### OEM option

Available for bulk buy OEM

### Made In

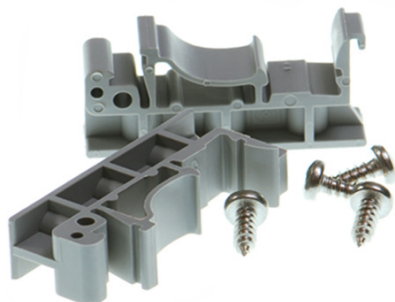
Manufactured in the UK by Brainboxes Winner 2005 European Electronics Industry Awards 'Manufacturer of the Year'

### Customisable

Brainboxes operate a 'Perfect Fit Custom Design' policy for volume users.

## Accessory Items

### ORDER CODE - DIN-Rail Mounting Kit - MK-048



### ORDER CODE - Optional Global Power Supply - PW-800

