











# ES-446 PoE ETHERNET TO SERIAL DEVICE SERVER Ethernet 1 Port RS232 Power Over Ethernet PoE

CONNECT, CONFIGURE, CONTROL YOUR SERIAL DEVICES



#### **Features**

- 1 Port RS-232 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 one RS232 serial port. 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. 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!

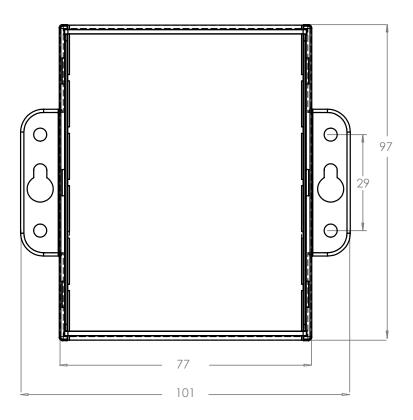
#### **Example Application**

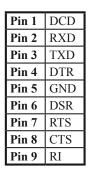




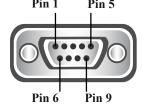
# **ES-446 Ethernet 1 Port RS232 Power Over Ethernet PoE**

## **Box Information**





RS232 Pinout (9 Pin Male)
Pin 1 Pin 5



## **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
	Flashing between Green & Yellow	Initialization diagnostic
Serial Port LEDs	Flashing between Green & Yellow  Green light on	Initialization diagnostic Port Open
Serial Port LEDs		
Serial Port LEDs  Network LED	Green light on	Port Open
	Green light on Flashing Green	Port Open Data RX / TX

**Port** 

Ports 1 port RS232

**Connector** DB9 Connector - 9 Pin Male

**Power Input** Power Over Ethernet OR 5 - 30V DC input, reverse polarity protected

**Power Consumption** 1.5 Watts Typical

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## ES-446 Ethernet 1 Port RS232 Power Over Ethernet PoE

#### Port Settings - RS232

**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, DSR/DTR, XON/XOFF

Tx/Rx Modes Point to Point

#### **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**  $0 \ \hat{A}^{\circ}C \ \text{to} +60 \ \hat{A}^{\circ}C \ / 32 \ \hat{A}^{\circ}F \ \text{to} +140 \ \hat{A}^{\circ}F$ 

**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

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 1 Port RS232 Power Over Ethernet PoE

Accessory Items Available from Brainboxes: Optional Global Power Supply - PW-800, DIN-Rail Mounting Kit - MK-048

Packaged Weight 0.234 kg, 8.25 ounces

Packaged Dims 160x135x45 mm, 6.3x5.3x1.8 inches

**UPC number** 837324003710

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# ES-446 Ethernet 1 Port RS232 Power Over Ethernet PoE

#### **Product Support**

Warranty Lifetime - online registration required

**Support** 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. More info:

sales@brainboxes.com

#### **Accessory Items**

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



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



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# **Drivers for Windows 10**

This product has software that works with Windows 10.

**Drivers are available for previous** versions of Windows Operating systems, including legacy applications.













# **Support Service**

Should you have any questions about your Brainboxes product please contact our technical support:

> Phone UK: +44 (0)151 220 2500 Toll Free USA: +1 (855) 958 2502

> > Email: support@brainboxes.com

> > > www.brainboxes.com



## **Accreditations**

All Brainboxes products come with the following as standard:













Certificates of all accreditations and conformities are available on request from quality@brainboxes.com