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# ES-420 PoE ETHERNET TO SERIAL DEVICE SERVER Ethernet 1 Port RS422/485 Power Over Ethernet PoE

# CONNECT, CONFIGURE, CONTROL YOUR SERIAL DEVICES



# Features

- 1 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 one RS422/485 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. 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!

# PoE Switch PoE Single Cable Connect, Configure, Control

# ES-420 Ethernet 1 Port RS422/485 Power Over Ethernet PoE

## **Box Information**



# 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	Green light on	Port Open
	Flashing Green	Data RX / TX
Network LED	Green light on	Link Established
	Flashing Green	Data RX / TX
Port		
Ports	1 port RS422/485	
Connector	DB9 Connector - 9 Pin Male	
Power Input	Power Over Ethernet OR 5 - 30V DC input, reverse polarity protected	
Power Consumption	1.74W	

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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 - Ethern	et	
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	$-10^{\circ}C$ to $+60^{\circ}C$ / $14^{\circ}F$ to $+140^{\circ}F$	
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 10 32 bit & 64 bit Editions / 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 11 32 bit & 64 bit Editions Windows 10 32 bit & 64 bit Editions Windows 8 32 bit & 64 bit Editions Windows 7 32 bit & 64 bit Editions Windows Server 2008 Windows Vista 32 bit & 64 bit Editions	
Gold Partner	Windows 8 Windows 7	
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Gold Partner	Mindows7 Window	
B AEOF 00031/11 Packing Information	Windows? Window	
B AEOF 00031/11 Packing Information Packaging	Compatible Windows*7 Windows	
AEOF 00031/11 Packing Information Packaging Device	Quick Start Guide, Microsoft signed drivers & utilities, Device	
AEOF 00031/11 Packing Information Packaging Device Accessory Items	Quick Start Guide, Microsoft signed drivers & utilities, Device Ethernet 1 Port RS422/485 Power Over Ethernet PoE	
B AEOF <del>0</del> 0031/11	Quick Start Guide, Microsoft signed drivers & utilities, Device Ethernet 1 Port RS422/485 Power Over Ethernet PoE Available from Brainboxes : Optional Global Power Supply - PW-800, DIN-Rail Mounting Kit - MK-048	

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Product Support		
Warranty	Lifetime - online registration required	SFETTIN
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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