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EST 1984

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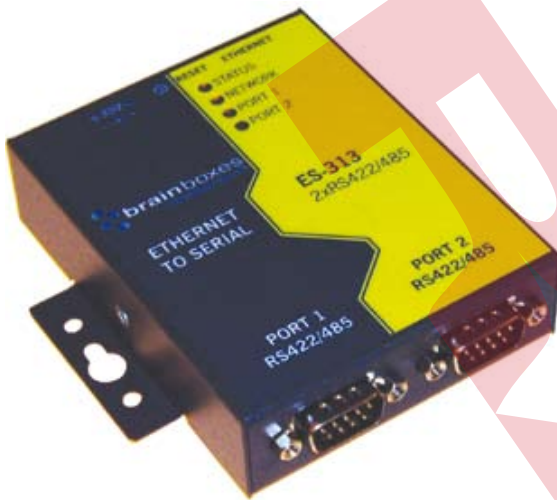
25th 1984 – 2009 Anniversary

NEW

ES-313 ETHERNET TO SERIAL DEVICE SERVER
Ethernet 2XRS422/485

CONNECT, CONFIGURE, CONTROL YOUR SERIAL DEVICES

Description

Ethernet to Serial device server providing access to two RS422/485 serial ports. Up to 230,400 data transfer rates, coupled with 1Mbit/s line drivers deliver uncompromising performance. Our ES range provides a simple, instant cable replacement providing network integration. RS485 - 2 wire half duplex configuration with autogating provides trouble free data transmission due to automatic control of data direction.

Windows Users - Our Boost.LAN driver gives you local COM ports, retaining existing software applications on your network and allowing you to connect over larger distances. Our ES products are simple, instant cable replacement providing network integration on Windows 7 and Windows XP. Can install on any COM Port from COM1 to COM255 and remembers your COM Port assignment on reboots.

Web Interface Users (Linux/Apple OS/Android) - Alternatively access the device via TCP/IP socket from any networked device. Configure options via web interface.
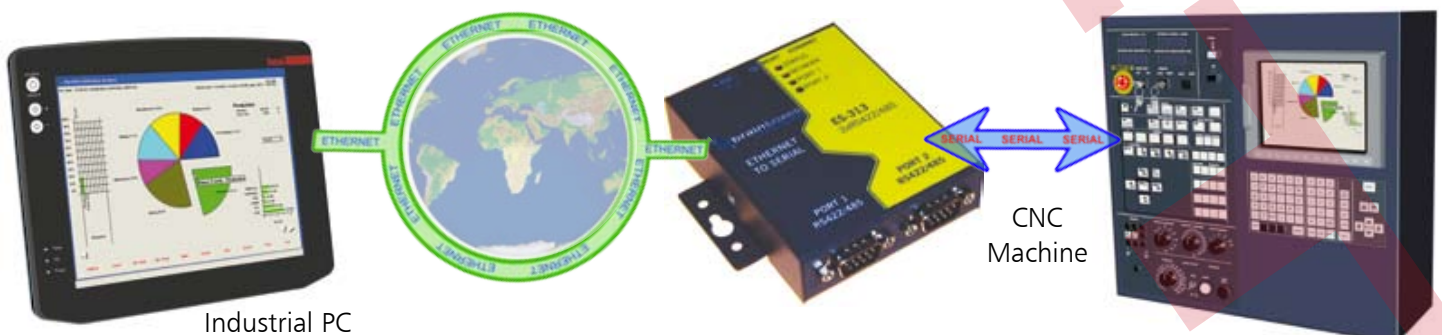
Extend your reach! Remote serial devices with local control.

With Brainboxes industry renowned Lifetime Warranty* and Lifetime Support!
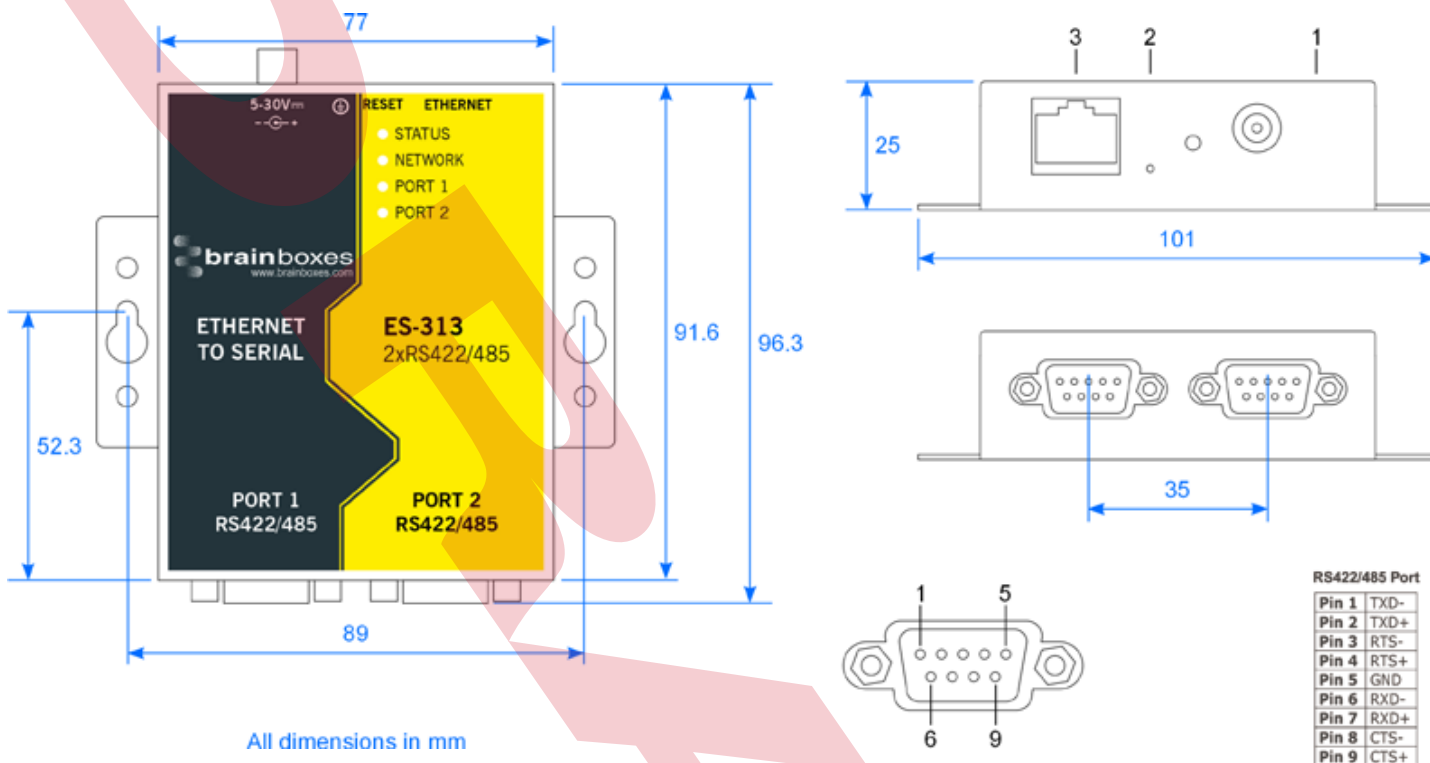
Features

- Max baud rate 230,400
- 10/100Base TX Ethernet port
- User friendly interface, simple to use, powerful in operation
- Web configuration and RFC2217 compliant interface for non-Windows users
- Rugged metal enclosure
- LED status indication
- Optional DIN rail mounting kit
- Power Supply included
- Power input 5-30V DC
- Simple operation for each and every operating system!

Example Application

Industrial PC

CNC Machine

ES-313 Ethernet 2XRS422/485

Box Information

All dimensions in mm

RS422/485 Port

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+

Key

1 - Power Input
2 - Reset button for device
3 - Ethernet port - 10/100 Mega bits/second

Box Dimensions

Size - 90x62x25 mm (not including mounting ears or connectors)
Size - 120x80x25 mm (including mounting ears or connectors)

LED Information

Status LED	Flashing 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
Ethernet LED	Green light on	Link Established
	Flashing Green	Data RX / TX

Port

Ports	RS422/485
Connector	DB9 connector -- 9 Pin Male
Power Input	5 - 30V DC input, reverse polarity protected

ES-313 Ethernet 2XRS422/485

NEW

Port Settings - RS422/485

Baud Rate	From 110 - 230,400
Data Bits	5,6,7 or 8
Parity	Odd, Even, None, Mark or Space
Stop Bits	1, 1.5 or 2
Flow Control	RTS/CTS, XON/XOFF
Tx/Rx Modes	RS422 Full duplex. RS485 4 wire full duplex or 2 wire half duplex with Autogating, automatic control of data direction. They have 128 byte FIFOs, 1 MegaBoard data transfer, with on board Hardware and Software flow control. **RS422 Standard:** RS422 allows one transmitter and up to 10 receivers with data transmitter rates up to 10 megabits per second for distances up to 40 feet and up to 100 Kilobits per second for distances up to 4,000 feet (1219 metres). To achieve good long distance noise immunity, 2 wires are used to carry each signal, configured as a twisted pair of cables. The TXD pair and RXD pair are used to carry the data whilst the RTS pair and CTS pair lines are used for handshaking. Thus 2 twisted pairs are used without handshaking and 4 twisted pair cable is used with handshaking both these schemes allow full duplex data communications. **RS485 Standard:** RS485, based on the RS422 standard allows up to 32 driver/receivers pairs on a standard load or 128 low load devices per port can be connected. Whilst only one of these should be transmitting data at any time, the rest can all simultaneously listen to the data. Handshaking is performed by software protocol. Two twisted pairs form a full duplex system. Often only one twisted pair cable is used as the TXD and RXD lines are tied together; this is known as half duplex mode. Brainboxes RS422/485 products implement a state of the art hardware autogating circuit ensuring error free communications in half duplex configurations.

Port Settings - Ethernet

Data Rate	10/100 Mega bits/second
Cabling	Normal / Crossover auto-sensing (Auto-MDIX)

Product Information

Power Consumption	awaiting
Product Weight	awaiting Kg

Environmental

Operating Temperature	0 to 55°c
Storage Temperature	-20 to 85°c
Ambient Relative Humidity	5 to 95% (non-condensing)

Software

Network Protocols	ICMP, IP, TCP, UDP, DHCP, BOOTP, Telnet, HTTP, RFC2217
Configuration Options	Windows Utility, Web Interface
OS Compatibility	Microsoft Windows 7 / Windows Server 2008 32 bit & 64 bit Editions / Windows Vista 32 bit & 64 bit Editions / Windows Server 2003 32 bit & 64 bit Editions / Windows XP 32 bit & 64 bit Editions / Microsoft Windows 2000 /Fully RFC2217 compliant / Interface for other OS's & Linux
Connection to Network	Ethernet 10BaseT / 100BaseTX

Approvals

Industry Approvals	WEEERoHS EMC: CE
Microsoft Approvals	Microsoft Certified Gold Partner
Microsoft Signed Drivers	Windows 7 32 bit & 64 bit Editions Windows Server 2008 32 bit & 64 bit editions Windows Vista 32 bit & 64 bit editions Windows Server 2003 32 bit & 64 bit editions

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Downloaded from Elcodis.com electronic components distributor

ES-313 Ethernet 2XRS422/485

Packing Information

Packaging	Installation CD including manual, Microsoft signed drivers & utilities
Device	Ethernet 2XRS422/485
Accessory Items	DIN-Rail Mounting Kit - MK-048 Power Supply (UK) - PW-544Power Supply (EU) - PW-511
Packaged Weight	awaiting Kg
Packaged Dims	awaiting mm

Product Support

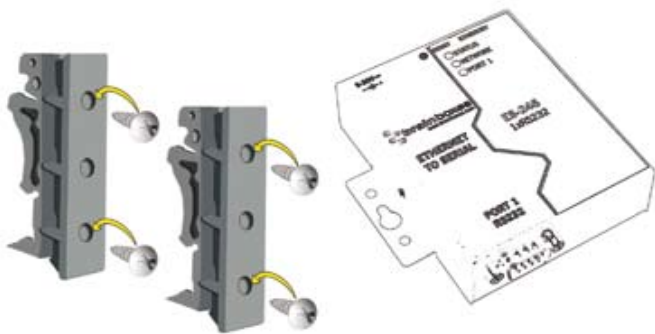|	
Warranty	Lifetime - online registration required
Support	Lifetime Web, Email and Phone Support from fully qualified, friendly staff who work in and alongside the Product Development Team

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 - Power Supply (UK) - PW-544
Power Supply (EU) - PW-511