

ES-357 ETHERNET TO SERIAL DEVICE

1 PORT RS232 + 1 PORT RS422/485 - Block terminal connector

CONNECT, CONFIGURE, CONTROL YOUR SERIAL DEVICES



Description

Ethernet to Serial device server providing access to one RS232 and one RS422/485 serial port. Up to 230,400 data transfer rates, coupled with 1Mbit/s line drivers deliver uncompromising performance.

Our Boost.net 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 XP and Vista. Alternatively access the device via TCP/IP socket from any networked device. Configure options via web interface.

RS485 - 2 wire half duplex configuration with autogating provides trouble free data transmission due to automatic control of data direction.

Extend your reach! Remote serial devices brought near.

With Brainboxes industry renowned Lifetime Warranty* and Lifetime Support!

Example Application



ORDER

Description

Ethernet to Serial 1xRS232 + 1xRS422/485
- Block terminal connector

Code
ES-357

OPTIONAL EXTRAS

ES-357 Power Supply UK
DIN-Rail Mounting Kit

Code
PW-644
MK-048

PRODUCT INFORMATION

Software

Microsoft signed drivers (easy installation & robust operation) for:

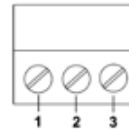
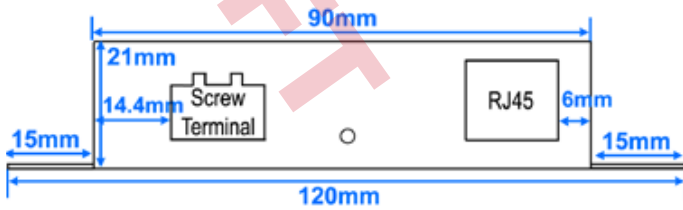
- Windows XP 32 bit & 64 bit Editions
- Windows Server 2003
- Windows 2000

Accreditations



ES-357 1xRS232 + 1xRS422/485 - Block terminal connector

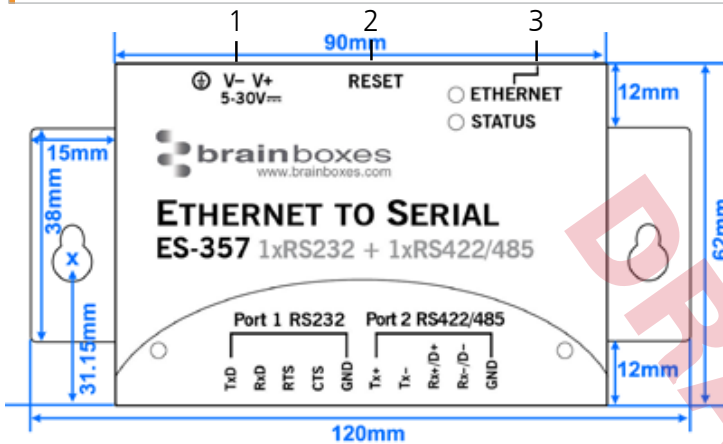
Power Connector Dimensions & Pin outs



Power Connector

| | | |
|-------|----|----------------------|
| Pin 1 | V+ | Power Supply + |
| Pin 2 | V- | Power Supply - |
| Pin 3 | | Earth/Chassis Ground |

Device Dimensions and Pin outs



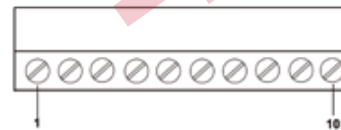
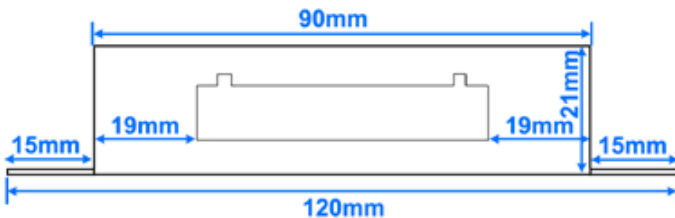
Key

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

Box Dimensions

- Size - 90 x 62 x 25 mm (not including mounting ears or connectors)
- Size - 120 x 80 x 25 mm (including mounting ears or connectors)

Screw Terminal Dimensions & Pin outs



RS232 Port

| | | | |
|-------|-----|--------|---------|
| Pin 1 | TxD | Pin 6 | TxD+ |
| Pin 2 | RxD | Pin 7 | TxD- |
| Pin 3 | RTS | Pin 8 | RxD+/D+ |
| Pin 4 | CTS | Pin 9 | RxD-/D- |
| Pin 5 | GND | Pin 10 | GND |

LED Information

| LED Information | LED Status | Meaning |
|------------------|-------------------------------------|---|
| 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 | Problem obtaining IP address |
| | Flashing between Green & Yellow | Problem during initialization (e.g. Firmware Problem) |
| 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 | 1 Port RS232 + 1 Port RS244/485 |
| Connector | Screw terminal block connector - 0.1 inch pitch |
| Power Input | 5 - 30V DC input, reverse polarity protected |

ES-357 1xRS232 + 1xRS422/485 - Block terminal connector

| Port Settings | |
|---------------|--------------------------------|
| RS232 | |
| Baud Rate | From 110 - 230,400 |
| Data Bits | 5, 6, 7 or 8 |
| Parity | Odd, Even, None, Mark or Space |
| Stop Bits | 1, 2 |
| Flow Control | RTS/CTS, XON/XOFF |

| 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, 2 |
| Flow Control | XON/XOFF |
| Tx/Rx Modes | <p>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.</p> <p>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).</p> <p>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.</p> <p>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.</p> |

| Port Settings | |
|-----------------|-------------------------|
| Ethernet | |
| Baud Rate | 10/100 Mega bits/second |
| Flow Control | Normal, auto-crossover |

| Product Information | |
|---------------------|-------------------------|
| Power Consumption | 1.8W Max / 1.0W Typical |
| Product Weight | 0.205kg |

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

ES-357 1xRS232 + 1xRS422/485 - Block terminal connector

| Software | |
|------------------------------|--|
| Network Protocols | ICMP, IP, TCP, UDP, DHCP, BOOTP, Telnet, HTTP, RFC2297 |
| Configuration Options | Windows Utility, Web Interface |
| OS Compatibility | Windows XP 32 & 64 bit Editions / Fully RFC2217 compliant Interface for other OS's & Linux |
| Connection to Network | Ethernet 10BaseT / 100BaseTX |

| Approvals | |
|---------------------------------|--|
| Industry Approvals | EMC: CE/FCC ROHS WEEE |
| Microsoft Approvals | Microsoft Certified Gold Partner |
| Microsoft Signed Drivers | Windows XP 32 & 64 bit Editions / Windows Server 2003 / Windows 2000 |

| Packing Information | |
|------------------------|--|
| Packaging | Installation CD including manual, Microsoft signed drivers & utilities |
| Device | Ethernet to Serial 1xRS232 + 1xRS422/485 |
| Optional Extras | Power Supply - PW-644 DIN Rail Kit - MK-048 |
| Packaged Weight | 0.305Kg |
| Packaged Dims | 140mm x 150mm x 4mm |

| 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 |

Optional Extras

