PRODUCT INFORMATION

B&B ELECTRONICS

ESP41x

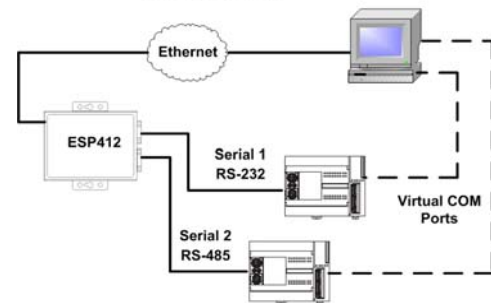## *RS-232/422/485 to Ethernet Serial Server*

✓ **Easy to Use and Configure – Software Included**

✓ **Data Rates up to 230 Kbps**

✓ **1, 2, or 4 Port Versions Available**

✓ **Supports RS-232, RS-422, and 2-Wire/4-Wire RS-485**

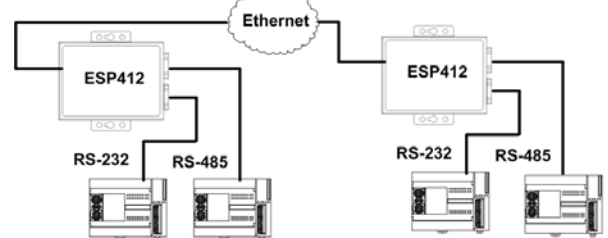✓ **Supports Virtual COM Port, Direct IP, and Paired Modes**

These commercial grade serial to Ethernet converters allow you to control serial devices located virtually anywhere, through a TCP/IP or UDP/IP Ethernet connection. They are equipped with one, two or four serial port connections on one side, and a 10/100 Mbps Ethernet connection on the other side, allowing you to easily connect legacy or new serial devices to your Ethernet network. Installation and configuration is quick and easy with the VLinx™ Manager Software provided on CD ROM. The software is compatible with Window 2000, 2003 Server, XP, and Vista. It is powered from a 12 VDC power supply (included with the unit). Power supply options for US, UK, and EU are available. With three operating modes to select from; Virtual COM Port, Straight IP, & Paired, you can easily network enable any RS-232/422/485 device. RS-485 supports both 2-Wire and 4-Wire modes.

- IEEE 802.3U 10/100BaseT, auto-detecting

- TCP Server, TCP Client, or UDP

- Direct IP, Paired, or Virtual COM

- TCP Probe – Automatically restores connection in Virtual COM mode

- Data rates up to 230 Kbps

- Power Supply Included

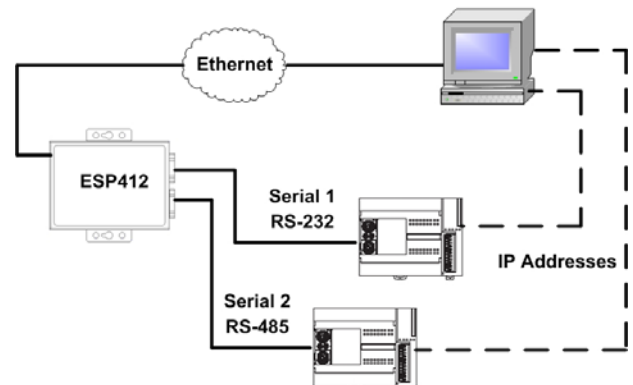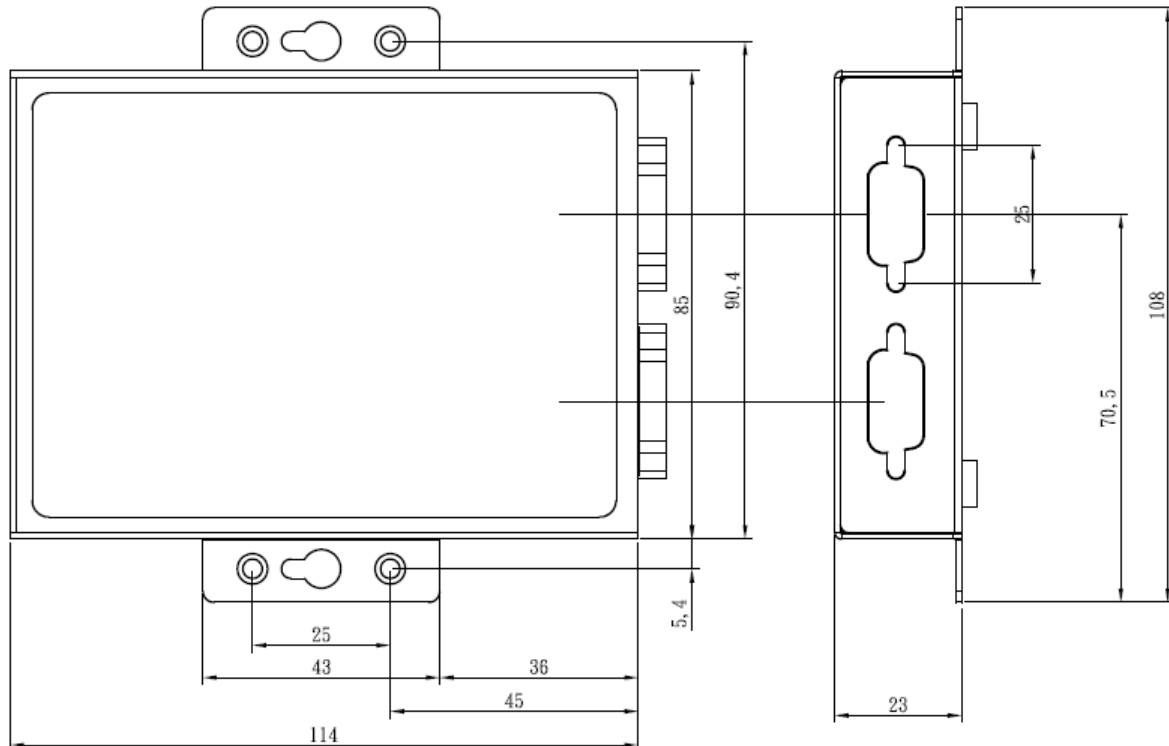**Virtual COM Port**

Paired Mode
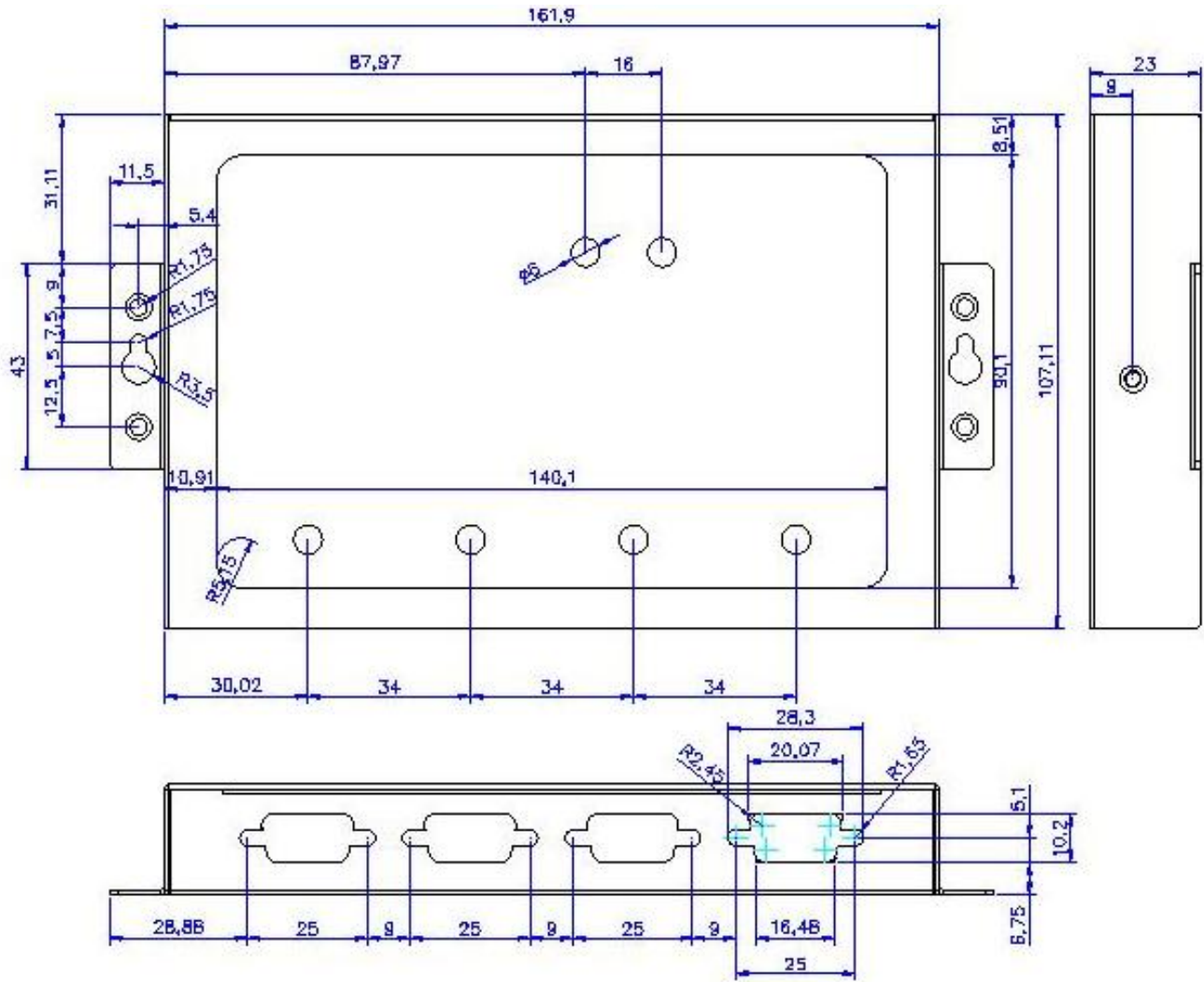
Direct IP

B&B electronics
MANUFACTURING COMPANY

International Headquarters: 815-433-5100 Fax 433-5104 *www.bb-elec.com*
European Headquarters: +353 91 792444 Fax +353 91 792445 *www.bb-europe.com*

PRODUCT INFORMATION

Specifications

Serial Interface	
Connector ESP411	DB9 Male (DTE), Terminal Block
Connectors ESP412	2 DB9 Male (DTE)
Connectors ESP414	4 DB9 Male (DTE)
Protocol	RS-232, RS-422,
	RS-485 2-Wire, RS-485 4-Wire
Data Rate	Up to 230.4 Kbps
Flow Control	None, RTS/CTS or XON/XOFF

Ethernet	
Standard	IEEE 802.3u,
	10/100 BaseT
	Auto detecting, Auto MDI/MDIX
Protocols	TCP, UDP, IP,ARP, ICMP,
	HTTP, Telnet, DHCP
Communication Type	TCP Server/Client, UDP
	UDP Multicast
	Straight IP, Paired,
	Virtual COM Port
Security	Password, IP Address Filtering
Operating System	Windows 2000, 2003 Server
	XP and Vista

Mechanical	
Enclosure	IP 30, Metal
Dimensions ESP411/412	4.5 x 4.3 x 1 in (114 x 108 x 23 mm)
Dimensions ESP414	4.2 x 7.3 x 1 in (107 x 185 x 23 mm)
Op Temp	0 to 131 F (0 to 55 C)
Storage Temp	-4 to 185 F (-20 to 85 C)
Op Humidity	0 to 95% Non-condensing
MTBF	193000 hours
MTBF Calc. Method	Parts Count Reliability Prediction

Power	
ESP41x	Power Adapter Included
	12 VDC, US Plug
	Input, 100 to 240 VAC, 47 to 63 Hz
	North American Plug
	Output 12 VDC, 0.5 mm Barrel
	Plug, center positive
ESP41x-EU	Same except EU Plug
ESP41x-UK	Same except UK Plug

Regulatory Approvals	
FCC	Part 15 Class A
CE	DoC Available for Download

Ordering Information	
ESP411	RS-232/422/485 MEI North American
ESP411-EU	RS-232/422/485 MEI EU
ESP411-UK	RS-232/422/485 MEI UK
ESP412	RS-232/422/485 MEI North American
ESP412-EU	RS-232/422/485 MEI EU
ESP412-UK	RS-232/422/485 MEI UK
ESP414	RS-232/422/485 MEI North American
ESP414-EU	RS-232/422/485 MEI EU
ESP414-UK	RS-232/422/485 MEI UK

Accessory Items (not included)	
C5UMB3FBG	UTP Ethernet Cable, 3 ft
9PAMF6	RS-232 Cable, DB9 M / DB9 F, 6 ft
232NM9FF6	RS-232 Null Modem Cable,
	DB9F / DB9 F 6 ft
DRAD35	DIN Rail Mounting Kit

Dimensional Diagram – ESP411 / ESP412
Units are in MM

B&B ELECTRONICS

B&B electronics
MANUFACTURING COMPANY

International Headquarters: 815-433-5100 Fax 433-5104 *www.bb-elec.com*
European Headquarters: +353 91 792444 Fax +353 91 792445 *www.bb-europe.com*

PRODUCT INFORMATION

B&B ELECTRONICS

Dimensional Diagram – ESP 414
Units in MM

B&B electronics
MANUFACTURING COMPANY