B&B ELECTRONICS

PRODUCT INFORMATION

Models: ESP901, ESP902 & ESP904

Ethernet Serial Servers

V-LINX™
Ethernet Serial Server

Features

- ✓ Ethernet Enable 1, 2 or 4 Serial Ports
- ✓ Compact Panel Mount Case
- ✓ Optional DIN Rail Adapter
- ✓ RS-232/422/485 Full and Half Duplex
- ✓ Auto Detect 10/100 Mbps Ethernet
- ✓ Virtual COM Drivers for Windows 2000, XP, Server 2003, Vista, Server 2008, & Win 7
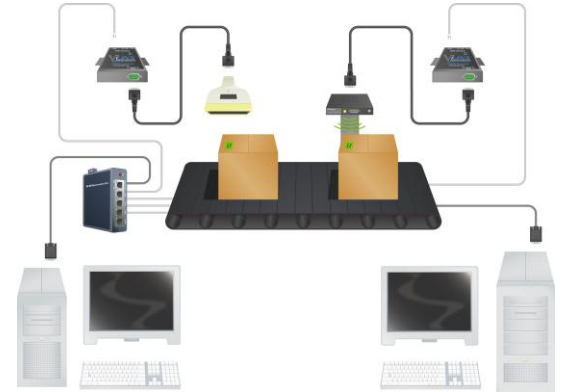
Functional Description

Ethernet enable any serial device using B&B's Vlinx Serial Server technology and put your serial ports to work for you. Imagine the ability to communicate with every piece of equipment from any networked PC. Eliminate site visits just to find a need to make a minor configuration change. Reduce service calls and increase productivity by knowing what your equipment is doing before you get a trouble-report. Spend more time doing the work you're paid to do instead of chasing down nuisance problems with remotely located equipment.

Much of today's high-tech equipment ships with a serial port for programming, monitoring or diagnostics. 80% of these serial ports are left unconnected, often because a person travels to the port to make the connection or a permanent PC is not desirable. With B&B's Vlinx Serial Servers, you can put all of those ports to work for you. Simply connect the Vlinx server to the equipment's serial port, and connect the Vlinx Ethernet port to your LAN. Your equipment is now online. It will appear as a local COM port on any networked PC running our Virtual Serial Port software. No software customization required, just run the appropriate software for your equipment.

The ESP90x family integrate the benefits of Ethernet communications with existing serial devices by offering the combination of three serial interfaces, RS-232, RS-422, and RS-485. The Ethernet connection will auto select 10BaseT or 100BaseTX.

These serial servers provide Windows host control over serial devices located virtually anywhere on a TCP/IP or UDP/IP Ethernet connection. They even give authorized users control over the connected serial device and the server configuration from anywhere outside the LAN.

Ordering Information

Model Number	Description
ESP901	Single Port Serial Server, 1 RS-232/422/485 port
ESP902	Dual Port Serial Server, 1 RS-232/422/485 port, 1 RS-232 port
ESP904	Quad Port Serial Server, 4 RS-232/422/485 ports

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PRODUCT INFORMATION

Accessories	
DRAD35	35mm DIN Rail Mounting Kit

Operation

- A detailed operating manual is contained on the CD ROM which ships with the product.

- Vlinx ESP Manager allows easy access to the serial server to configure the server and ports, upgrade server firmware and monitor port status and activity. When ESP Manager opens it will search for and display all ESP90x serial servers on the network. The Monitor Port feature allows you to use any PC on the LAN/WAN to actively view and troubleshoot the communications status. It shows when there is a client connection to the server and the client IP address. It displays the number of bytes transmitted and received as well as the status of the hardware handshaking lines

- ESP901/ESP902/ESP904 serial servers can be accessed and configured from any web browser (such as Internet Explorer) on the LAN/WAN. This allows you to remotely manage the software and your serial device. It also allows off-site troubleshooting.

- ESP901/ESP902/ESP904 serial servers provide automatic resumption of the TCP data connection in case of a power failure or loss of an Ethernet connection on either the client or server. Once the Heartbeat connection is established the server sends a signal to the client every five seconds. If the signal is not received, the serial server will attempt to reconnect the TCP data connection every five seconds until communication is established again.

Specifications

Serial

Serial Interfaces:	RS-232 (DTE), RS-422, RS-485 (2/4-Wire) DIP Switch Selectable
Serial Connectors:	ESP901: 1 x DB9 Male
	*ESP902: 2 x DB9 Male
	ESP904: 4 x DB9 Male
Baud Rate:	110 to 230.4 kbps, 5787 bps
Parity:	None, Even, Odd, Mark, Space
Data Bits:	5, 6, 7, or 8
Stop Bits:	1, 1,5, or 2
Buffer:	8 Kb per port

Note: Refer to the manual for pin-outs and signals.

*ESP902 has (1) RS-232/422/485 port and (1) RS-232 port

Ethernet

Connector:	RJ-45 F
Data Rate:	10/100 Mbps Auto-detecting 10BaseT or 1000BaseTx
Protocols:	TCP, IP, ARP, DHCP, Telnet, HTTP, UDP ICMP

Configuration

Console:	RS-232 w/ VT100 Emulation
Telnet:	HyperTerminal w/VT100 Emulation
ESP Manager:	Compatible with Windows 2000, XP (32/64 bit) Server 2003 (32/64 bit), Vista (32/64 bit), Server 2008 (32/64 bit), Win 7 (32/64 bit)
HTTP:	Embedded Web Page

Power (Power Supply Included)

Voltage:	12 VDC
Current	ESP901: 200 mA
	ESP902: 300 mA
	ESP904: 500 mA
Connector:	2.5 mm Jack (Positive Tip)

Environment

Operating Temp:	-14 to 176 F (-10 to 80 C)
Storage Temp:	-4 to 185 F (-20 to 85 C)
Humidity:	5 to 90% Non-condensing
Dimensions:	
ESP901	3.4 x 4.5 x 0.90 in (8.5 x 11.5 x 2.3 cm)
ESP902	3.4 x 4.5 x 0.90 in (8.5 x 11.5 x 2.3 cm)
ESP904	4.5 x 7.3 x 1.1 in (11.4 x 18.5 x 2.9 cm)
Enclosure:	IP 30
Approvals:	CE, FCC

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