



Models: PES1A, PESV1A

## Serial Server with Power over Ethernet (PoE)

### Description

Power-over-Ethernet technology is a new Ethernet extension intended to eliminate the cost and clutter of power supplies. Using PoE, power is injected by the Ethernet switch or Ethernet midspan device onto the Ethernet cable itself. With PoE, specially designed Ethernet devices can draw their power through the Ethernet cable eliminating the need for separate wall-transformers and power

cords. Both PES1A and PESV1A offers RS-232 serial server with PoE. Additionally PESV1A adds 3 selectable power outputs for your end device.

**Selectable power:** While these units comply fully with the IEEE 802.3af standard governing PoE transmissions, there is no standard for the power to serial devices such as bar code scanners, slip printers or other devices. This creates a challenge for the system integrator, VAR, OEM and customer. To counter this, variable voltage levels are built into the serial servers, selectable by switch or the built-in web server (PESV1A only). They can meet virtually any DC voltage requirement, with power up to 4 W (125mA max in rush).

### Features

- Transparent 10/100Mbps operation
- Auto-detects the power requirement
- Compatible with IEEE 802.3af
- Current limited ports for short circuit protection

### Benefits

- RJ45 10/100BaseT auto-sensing interfaces
- Supports the IEEE 802.3af standard for Power-over-Ethernet
- Simple plug & play operation
- Single RS-232, DB9 serial interface
- Adjustable output power: 5, 9 or 12 VDC hardware selectable (PESV1A only @ 4 W max)
- Compact size: PES1A: 0.9 x 1.6 x 3.8 in, PESV1A: 1.0 x 2.8 x 5.1 in

### Applications

- Retail/POS
- Building automation/security
- Convenience store/gas station
- Telecom VoIP



**B&B electronics**  
MANUFACTURING COMPANY

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## Specifications

LAN interface:	IEEE 802.3, IEEE 802.3af (spare or data pair)
Data rate:	10BaseT, 100BaseTX (auto detecting)
Data mode:	Full or half duplex (auto detecting)
Protocols supported:	TCP, UDP, DHCP, SNMP, SSL/TLS, TELNET, RLOGIN, RFC 2217, LPD, HTTP/HTTPS, SMTP, ICMP, IGMP, ARP
LAN connector:	RJ45 - 8 pin
Serial support:	TD, RD, RTS, CTS, DTR, DCD, DSR, GND
Serial baudrate:	50, 75, 110, 134, 150, 200, 300, 600, 1200, 1800, 2400, 3600, 4800, 9600, 14400, 19200, 28800, 38400, 57600, 115200, 230400
Serial connector:	DB9 male
Data bit:	5, 6, 7, 8
Data parity:	Mark, space, none, even, odd
Stop bit:	1, 2
Flow control:	none, RTS/CTS, XON/XOFF
Management:	Web browser
Client software:	Virtual COM port driver, discovery software
VCOM O/S:	Windows 98, ME, 2K, XP, NT 4.0, Vista
Communication mode:	Virtual COM port mode, direct IP mode, pair mode
Power input:	48 VDC via PoE Class 3
Power output (PESV1A):	2 position terminal block 5, 9, or 12VDC (slide switch selectable) @ 4W max (125mA in rush max)
LEDs:	Power (red – PESV1A only) LAN link (yellow) Data activity (green)
Operating temperature:	0° to 70° C (32° to 158° F)
Storage temperature:	-40° to 85° C (-40° to 185° F)
Relative humidity:	10 to 90% non-condensing
Certifications:	FCC, CE
Dimensions:	PES1A                    0.9 x 1.6 x 3.8 in (2.3 x 4.1 x 9.7 cm) PESV1A                1.0 x 2.8 x 5.1 in (2.5 x 7.1 x 13.0 cm)

### DECLARATION OF CONFORMITY

Manufacturer's Name:	B&B Electronics Manufacturing Company
Manufacturer's Address:	P.O. Box 1040 707 Dayton Road Ottawa, IL 61350 USA
Model Numbers:	PES1A, PESV1A
Description:	1 Port Serial Server with PoE (PESV1A with power output)
Type:	Light industrial ITE equipment
Application of Council Directive:	89/336/EEC
Standards:	EN 55022 EN 61000-6-1 EN 61000 (-4-2, -4-3, -4-4, -4-5, -4-6, -4-8, -4-11)



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