

# Ultra Compact Ethernet Serial Servers

BB-VESR900 Series - Copper Models

**B+B SMARTWORX**

Powered by

**ADVANTECH**

[www.advantech-bb.com](http://www.advantech-bb.com)



BB-VESR901

## FEATURES

- Ethernet enable RS-232/422/485 serial devices
- Direct IP, virtual COM port or paired mode
- Industrial 10 to 48 VDC input power (power supply required, not included, sold separately)
- Wide operating temperature (-40 to +80 °C)
- Dual Ethernet pass-through port option (BB-VESR921)
- UL Class 1/Division 2
- NEMA TS2 (BB-VESR901)

Take control of your serial devices with Vlinx™ BB-VESR9xx Industrial Ethernet Serial Servers. If it has a serial port, it can be monitored and controlled from anywhere on your Ethernet LAN or WAN. Keep at maximum productivity without leaving your office. Configure devices, upgrade firmware monitor and troubleshoot from outside your LAN via the internet/web browser. The easy-to-use Vlinx™ Manager software puts access to your entire factory floor on your desk.

Model BB-VESR921 also features an additional copper RJ45 port that allows you to connect another Ethernet device or PC work-station. This pass-through port functions much like an unmanaged switch.

Heartbeat connectivity keeps the serial server online. If connectivity is lost, it attempts to reconnect every five seconds until connection is regained. A manual reboot is not needed when communications are restored.

Fiber options are also available - contact B+B SmartWorx.

## ORDERING INFORMATION

MODEL NUMBER	SERIAL PORTS	SERIAL CONNECTORS	ETHERNET MEDIA	ETHERNET CONNECTORS
BB-VESR901*	1	DB9 & TB	Category 5	RJ45
BB-VESR902D	2	DB9	Category 5	RJ45
BB-VESR921	1	DB9 & TB	Category 5	(2) RJ45

\* NEMA TS2

## ACCESSORIES – sold separately

**BB-MDR-40-24** - 24VDC Power Supply, 1.7 A Output Power, DIN Rail Mount

**BB-DRPM25** - 35mm DIN Rail to Panel Mount Adapter Bracket

**BB-TBKT2** - (1) 5-position, 5.08 mm, Replacement Terminal Block

**BB-TBKT1** - (1) 2-position, 5.08 mm, Replacement Terminal Block

All product specifications are subject to change without notice.  
BB-VESR900 Series\_5018ds

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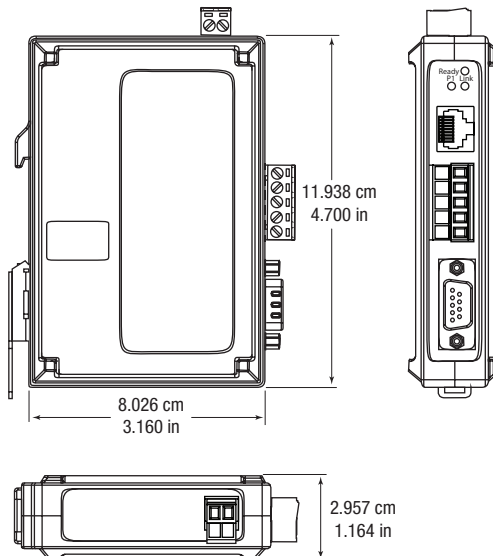
BB-VESR921

### SPECIFICATIONS

SERIAL TECHNOLOGY	
RS-232	TD, RD, RTS, CTS, DTR, DSR, DTD, GND
RS-485 2-Wire	Data A(-), Data B(+), GND
RS-422/485 4-Wire	TDA(-), TDB(+), RDA(-), RDB(+), GND
Serial Connector	DB9M or Removable Terminal Blocks
Data Rate	Up to 230.4 Kbps
POWER	
Source	External, required (not included, sold separately)
Input Voltage	10 to 48 VDC (58 VDC, maximum)
Connector	Removable Terminal Block (12 – 28 AWG)
Power Consumption	BB-VESR90x: 4.0 Watts, maximum BB-VESR92x: 6.0 Watts, maximum
MECHANICAL	
LED Indicators	Serial Port, Ethernet Link, Ready
Switches	Reset Button
Dimensions	BB-VESR90x: 11.94 x 8.03 x 2.96 cm (4.70 x 3.16 x 1.16 in) BB-VESR92x: 14.86 x 10.11 x 2.96 cm (5.85 x 3.98 x 1.16 in)
Enclosure	35mm DIN mount, Plastic, IP30
Weight	BB-VESR90x: 149.7 g (0.33 lb) BB-VESR92x: 204.1 g (0.45 lb)
ENVIRONMENTAL	
Operating Temperature	-40 to +80 °C (-40 to +176 °F)
Operating Humidity	0 to 95% Non-condensing
MEANTIME BEFORE FAILURE (MTBF)	
MTBF	BB-VESR901: 873201 hours BB-VESR902D: 700618 hours BB-VESR921: 418435 hours
MTBF Calc. Method	Parts Count Reliability Prediction
NETWORK	
Serial Memory	8 KB per port
Network Memory	4 KB
NETWORK COMMUNICATIONS	
LAN	10/100 Mbps auto-detecting, 10BaseT or 100BaseTX

NETWORK PHYSICAL LAYER STANDARDS	
Ethernet	IEEE 802.3 auto-detecting & MDI/MDX, 10BaseT & 100Base TX
PROTOCOLS	
Protocols	TCP, IPv4, UDP, ARP, HTTP 1.0, ICMP/PING, DHCP/BOOTP
IP Mode	Static, DHCP
TCP/UDP	User definable
OTHER	
Connection Mode	Server, Client, VCOM, Paired
Client Connection	At power up or upon data arrival
Search	Serial direct COM and Ethernet Auto Search or specific IP
Diagnostics	Display PC IP, ping, test VCOM, save test config (text readable)
Firmware Upgrade	Vlinx Manager
ETHERNET PASS-THROUGH PORT (BB-VESR92X)	
Standards	IEEE 802.3, 802.3u, 802.3x
Processing Type	Store and Forward with 802.3x full duplex, non-locking flow control
Flow Control	IEEE 802.3x flow control, back pressure flow control
MAC Address Table	2K
CONFIGURATION SOFTWARE	
Vlinx Manager	Windows 2000, XP (32/64 bit), 2003 Server (32/64 bit), Vista (32/64 bit), 2008 Server (32/64 bit), 7 (32/64 bit), 10 (32/64 bit)
APPROVALS, DIRECTIVES, STANDARDS	
Approvals	FCC, CE, NEMA TS2 (Model# BB-VESR901 only) UL Listed (#E2222870), UL Class 1/Division 2 A, B, C, D (#E245458)
CE - Directives	2014/30/EU - Electromagnetic Compatibility Directive 2011/65/EU - Reduction of Hazardous Substances Directive (RoHS) 2012/19/EU - Waste Electrical and Electronic Equipment (WEEE)
CE - Standards (EMC)	EN 55032 Class B - Electromagnetic Compatibility of Multimedia Equipment - Emission Requirements EN 55024 - Information Technology Equipment - Immunity Characteristics - Limits and Methods of Measurement EN 61000-6-1 - Generic Immunity Standard for Residential, Commercial and Light-industrial Environments EN 61000-6-2 - Generic Standard - Immunity for (Heavy-) Industrial Environments

### MECHANICAL DIAGRAM - BB-VESR90x models



### MECHANICAL DIAGRAM - BB-VESR921 model

