

Four-port Industrial Ethernet Serial Server

Model BB-VESR424D

B+B SMARTWORX

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FEATURES

- Add serial devices as nodes to Ethernet network
- Configure, monitor and make upgrades remotely
- Data rate: up to 230.4 kbps
- -40 to +80 C° wide operating temperature
- Panel or DIN rail mountable (adapters included)
- UL Class 1/Division 2, NEMA TS2, Shock/Vibration
- 10-48 VDC power (power supply required, not included, sold separately)

Vlinx™ BB-VESR424D Ethernet to Serial Server connects serial devices (RS-232, RS-422 or RS-485) to Ethernet networks, allowing the serial device to become a node on the network.

Serial ports can be accessed over a LAN/WAN using Direct IP Mode, Virtual COM Port, or Paired Mode connections. Model BB-VESR424D serial server features 10BaseT or 100BaseTX copper network media and an additional copper Ethernet pass-through port.

Rugged, Industrial Design

This Class 1/Division 2 and NEMA TS2 serial server is built for use in industrial and transportation environments with a heavy-duty metal enclosure that is panel or DIN rail mountable. It operates from a range of DC power supply voltages and features a pluggable terminal block power connector as well as a locking barrel connector to facilitate redundant power sources. An external power supply is required (not included, sold separately).

Ease of Use

Configuration, upgrades and monitoring are easy tasks using the Vlinx™ Manager software. It installs on your PC giving you access to the serial server via your desktop. Remotely manage the serial server over a LAN or WAN via the built-in web server and a web browser – helpful for off-site troubleshooting.

ORDERING INFORMATION

MODEL NUMBER	ETHERNET PORTS	ETHERNET CONNECTOR 1	ETHERNET CONNECTOR 2	SERIAL CONNECTOR (X4)
BB-VESR424D	2	RJ-45	RJ-45	DB9 Male

Mounting hardware included: DIN Rail and Panel Mount Adapters.

ACCESSORIES - sold separately

BB-MDR-40-24 - Power Supply, 24VDC, 1.7A output power, DIN rail mount

All product specifications are subject to change without notice.

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SPECIFICATIONS

SERIAL TECHNOLOGY	
RS-232 (DB9)	TD, RD, DTR, DSR, RTS, CTS, DCD, plus Signal Ground
RS-485 2-Wire	Data A(-), Data B(+), GND
RS-422/485 4-Wire	TDA(-), TDB(+), RDA(-), RDB(+), GND
Serial Connector	DB9 Male
Data Rate	Up to 230.4 kbps
POWER	
Source	External, required (power supply not included, sold separately)
Input Voltage	10 to 48 VDC (58 VDC, maximum)
Connector	Removable Terminal Block (16 – 28 AWG) (Use TB for UL C1/D2 applications.)
Power Consumption	6.0 Watts, maximum
MECHANICAL	
LED Indicators	Serial Port, Ethernet Link, Speed
Switches	Reset Button
Dimensions	17.145 x 11.237 x 4.572 cm (6.750 x 4.424 x 1.800 in)
Enclosure	IP30, metal
Mounting	Panel or 35mm DIN rail mount (adapters included)
ENVIRONMENTAL	
Operating Temperature	-40 to +80 °C (-40 to +176 °F)
Operating Humidity	10 to 95%, non-condensing
MEANTIME BETWEEN FAILURES (MTBF)	
MTBF	70273 hours
MTBF Calculation 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 & Auto MDI/MDX, 10BaseT and 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
Firmware Upgrade	Vlinx Manager
ETHERNET PASS-THROUGH PORT	
Standards	IEEE 802.3, 802.3u, 802.3x
Processing Type	Store and Forward with 802.3x full-duplex, non-blocking flow control
Flow Control	IEEE 802.3x flow control, back pressure flow control
CONFIGURATION SOFTWARE	
OS Compatibility	Windows 2000, XP (32/64 bit), 2003 Server (32/64 bit), Vista (32/64 bit), 2008 Server (32/64 bit), 2012 Server-r2 (32/64 bit), 7 (32/64 bit), 8 (32/64 bit), 10 (32/64 bit)
REGULATORY - APPROVALS, DIRECTIVES, STANDARDS	
	FCC, Part 15 Class A
	UL Class 1/Division 2
	Shock - IEC 600068-2-27
	Vibration - IEC 600068-2-6
	NEMA TS2
CE Directives	2014/30/EU – Electromagnetic Compatibility 2011/65/EU – Reduction of Hazardous Substances (RoHS) 2012/19/EU – Waste Electrical and Electronic Equipment (WEEE)
CE Standards	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 standards for residential, commercial and light-industrial environments EN 61000-6-2 – Generic standards - Immunity (heavy) industrial environments

MECHANICAL DIAGRAM – BB-VESR424D

Units = [mm] in

