

# Ultra Compact Ethernet Serial Servers

BB-VESP211 series

ADVANTECH

www.advantech.com



BB-VESP211

## PRODUCT FEATURES

- Ethernet enable serial devices
- Data rate: up to 230.4 kbps
- RS-232, RS-422/485, RS-232/422/485 to Ethernet models
- IP30 metal enclosure - panel mount (DIN rail option)
- Compact design fits into tight installations
- 10-30Vdc power supply required and included
- UL 60950 Listed

## OVERVIEW

BB-VESP211 series Ethernet Serial Servers connect serial devices (RS-232, RS-422 or RS-485) to Ethernet networks, allowing the serial device to become a node on the network. The serial port can be accessed over a LAN/WAN using Direct IP Mode, Virtual COM Port, or Paired Mode connections. BB-VESP211 series Ethernet Serial Servers feature 10BaseT or 100BaseTX copper network.

The product is built for use in harsh environments, featuring a heavy-duty metal enclosure that is panel (standard) or DIN rail mountable (with optional adapter).

### Power Source (included)

The product requires and operates from a 10-30Vdc range of power inputs. It ships with an included AC wall power supply that features a universal AC input, barrel connector and interchangeable blades for North America, Europe, UK, Australia and China.

### Ease of Use

Configuration, upgrades and monitoring are simple, easy tasks with Vlinx™ Manager Software. It installs right on your PC giving you access to the serial server via your desktop. Manage remotely over a LAN or WAN via the built-in web server. This is helpful for off-site troubleshooting and can be done with a simple web browser.

## ORDERING INFORMATION

MODEL NUMBER	SERIAL PROTOCOL	SERIAL PORT	ETHERNET PORTS	ETHERNET CONNECTOR
BB-VESP211	RS-232/422/485	DB9M	1	RJ45
BB-VESP211-232	RS-232	DB9M	1	RJ45
BB-VESP211-485	RS-422/485	Removable Terminal Block	1	RJ45

### ACCESSORIES - sold separately

**BB-SMI6-12-V-P5** - Power supply, 12V DC, 6 Watt, 5mm plug, International AC input, International AC blades. *One power supply (this model#) included with product.*

**BB-DRAD35** - Optional DIN rail adapter clip (pair)

**BB-232NM9** - Optional null modem crossover cable for DTE to DTE connection

**BB-TBKT2** - Replacement terminal block, 5-position, 5.08mm, 8A, 30

All product specifications are subject to change without notice.  
BB-VESP211 series\_5119ds

ADVANTECH

Advantech B+B SmartWorx, 707 Dayton Road, PO Box 1040 Ottawa, IL 61350 USA 1 (800)346-3119/Toll Free | orders@advantech-bb.com | support@advantech-bb.com

# Ultra Compact Ethernet Serial Servers

BB-VESP211 series



BB-VESP211-232

## 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 Protocols & Connectors	
BB-VESP211:	RS-232/422/485 (DB9 male)
BB-VESP211-232:	RS-232 (DB9 male)
BB-VESP211-485:	RS-422/485 (removable terminal block)
Data Rate	Up to 230.4 Kbps
MECHANICAL	
LED Indicators	Serial Port, Ethernet, Ready LED's
Switches	Reset Button
Dimensions	BB-VESP211 - 7.938 x 5.257 x 2.209 cm
Enclosure	IP30 metal; panel mount (DIN rail mount with optional adapter clips)
ENVIRONMENTAL	
Operating Temperature	0 to +40 °C with included power supply. -40 to +80 °C without power supply.
Operating Humidity	10 to 95%, non-condensing
POWER SOURCE - INCLUDED	
Included Power Supply	AC Wall Adapter Power Supply & international blade kit
Output Voltage	12Vdc
Output Current	0.5A, maximum
Output Power	6W, maximum
Ripple & Noise	200mVp-p, maximum
Output Plug	Standard DC straight plug; 2.1mm barrel connector
Input Voltage	90 to 264 V AC
Frequency	47 to 63 Hz
Power Connector Dimensions	5.5 x 2.1 mm
Power Consumption	2.5 Watts, maximum No load; Level VI = 0.1W; ErP Tier 1 = 0.075W
Operating Temperature	0 to +40 °C (+32 to +104 °F)
Storage Temperature	-10 to +70 °C (-14 to +158 °F)
Operating Humidity	20 to 80%
Storage Humidity	10 to 90%
International Blade Kit	North America, Europe, U.K., Australia, China, Japan

MEANTIME BETWEEN FAILURES (MTBF)	
MTBF	BB-VESP211: 1316219 hours BB-VESP211-232: 1153248 hours BB-VESP211-485: 1000086 hours
MTBF Calculation Method	MIL 217 F Parts Count Reliability Prediction
NETWORK	
Serial Memory	8 KB per port
Network Memory	4 KB
LAN	10/100 Mbps Auto-detecting, 10BaseT or 100BaseTX
Ethernet	IEEE 802.3 auto detecting & auto MDI/MDI-X, 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
UDP	Unicast or Multicast
NETWORK	
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	via Vlinx™ Manager
CONFIGURATION SOFTWARE	
Vlinx™ Manager Windows O/S	(32/64 bit): 2003 Server, Vista, 2008 Server, 7, 8/8.1, 10
REGULATORY	
Compliance	FCC, Part 15 Class B, UL 60950
CE - Directives	2004/30EC - Electromagnetic Compatibility Directive 2014/35/EU - Low Voltage Directive 2015/863/EU - Reduction of Hazardous Substances Directive (RoHS-3) 2012/19/EU - Waste Electrical and Electronic Equipment (WEEE)
CE - Standards	<b>EMC:</b> EN 55032 Class B - Electromagnetic Compatibility of Multimedia Equipment - Emission Requirements EN 55024 - Information Technology Equipment - Immunity Characteristics - Limits and Methods of Measurement <b>Safety:</b> EN 60950-1 +A1 +A11 +A12 +A2 - Information Technology Equipment

## MECHANICAL DIAGRAM - BB-VESP211-485

