

# Ultra Compact Ethernet Serial Servers

BB-VESR901, BB-VESR902D, BB-VESR902T

# ADVANTECH

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## 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)
- UL Class 1/Division 2

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.

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.

## 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-VESR902T  | 2            | TB                | Category 5     | RJ45                |

## ACCESSORIES – sold separately

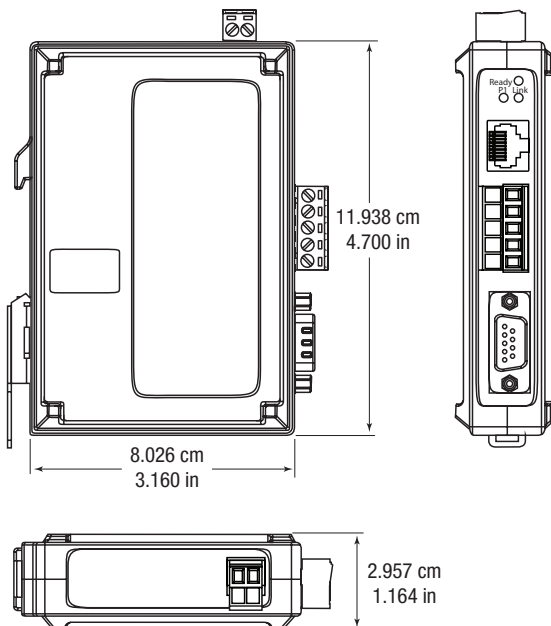
**BB-MDR-40-24** - 24VDC Power Supply, 1.7 A Output Power, DIN Rail Mount

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

**BB-TBKT1** - Replacement Terminal Block - 2-position, 5.08mm, 8A, 30

**BB-TBKT2** - Replacement Terminal Block - 5-position, 5.08mm, 8A, 30

## MECHANICAL DIAGRAM - BB-VESR901



All product specifications are subject to change without notice.  
BB-VESR901\_BB-VESR902D\_1220ds

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BB-VESR902T

BB-VESR902D

## 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  | DB9 Male 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                     |

### MECHANICAL

|                |                                   |
|----------------|-----------------------------------|
| LED Indicators | Serial Port, Ethernet Link, Ready |
| Switches       | Reset Button                      |
| Dimensions     | 11.94 x 8.03 x 2.96 cm            |
| Enclosure      | 35mm DIN mount, Plastic, IP30     |
| Weight         | 149.7gm                           |

### ENVIRONMENTAL

|                       |                          |
|-----------------------|--------------------------|
| Operating Temperature | -40 to +80 °C            |
| Operating Humidity    | 0 to 95%, non-condensing |

### MEANTIME BETWEEN FAILURES (MTBF)

|                   |  |
|-------------------|--|
| MTBF              | BB-VESR901: 873201 hours<br>BB-VESR902D: 700618 hours<br>BB-VESR902T: 375122 hours |
| MTBF Calc. Method | MIL217F 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-VESR922T)

|                   |   |
|-------------------|---|
| 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 OS | Windows 2000, XP (32/64 bit), 2003 Server (32/64 bit), Vista (32/64 bit), 2008 Server (32/64 bit), 7 (32/64 bit), 8 (32/64 bit), 10 (32/64 bit) |
|------------------|---|

### APPROVALS, DIRECTIVES, STANDARDS

|                      |  |
|----------------------|--|
| Approvals            | FCC, CE<br>UL Listed, UL Class 1/Division 2 A, B, C, D   |
| CE - Directives      | 2014/30/EU - Electromagnetic Compatibility<br>2011/65/EU amended by (EU) 2015/863 Reduction of Hazardous Substances Directive (RoHS)<br>2012/19/EU - Waste Electrical and Electronic Equipment (WEEE)          |
| CE - Standards (EMC) | EN 55032 Class B - Electromagnetic Compatibility of Multimedia Equipment - Emission Requirements<br>EN 55024 - Information Technology Equipment - Immunity Characteristics - Limits and Methods of Measurement |