### 6 Troubleshooting

The primary check for correct operation is the device LEDs.

For advanced set up information, see the "HELP" section on the right hand side of each page within the Vlinx™ Manager.

Select Diagnostic for a check of communications status with attached VESP211x device, and then select the device for which the communications check is desired. A report of reply times and ping statistics is generated and can be saved.

Note: you can also send your configuration files to Advantech B+B SmartWorx Technical Support for review.

Reset Mode Switch				
Mode Switch Action	Result			
Press and Hold in for 0-2 seconds.	Resets the unit.			
Press and Hold in for 2-10 seconds.	Puts unit in Console Mode. The Ready LED turns OFF and the Serial LED turn On Solid.			
Press and Hold in for more than 10 seconds.	Reloads Factory Defaults. Both Serial and Ready LEDs turn On Solid.			

# 7 UL Installation Instruction (UL File E353510)

This product is rated to 80°C; if ambient is above 60°C, this product should be placed in a Restricted Access Area.

Ce produit est évalué à 80°C, si la température ambiante est supérieure à 60°C, ce produit doit être placé dans une zone d'accès restreint."

#### **Recommended Accessories**

DIN Rail Adapter Brackets # BB-DRAD35



Null Modem DTE-DCE Crossover Cable # BB-232NM9

Replacement Terminal Block # BB-TBKT2

**Ethernet Cables** 



**12Vdc Power Supply** # BB-SMI6-12-V-P5 Note: one included with server.

**ADVANTECH** 







#### Models: BB-VESP211, BB-VESP211-232, BB-VESP211-485

Ultra Compact Ethernet to Serial Servers

## Before you begin, make sure you have the following:

- + VESP211x product
- + CD with software and manuals
- + 12Vdc wall adapter power supply
- + Optional items, not included:
  - + Ethernet cable(s)
  - + Null modem cable(s)
  - + Mounting accessories kit



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#### **Product Overview**



LEDs					
Ready	Blinking	System operating correctly			
	OFF or Solid ON	Not operating correctly or not ready			
Ethernet	ON	Ethernet port is connected			
	Blinking	Data is being transmitted or received			
Serial	ON and "Ready" LED is Blinking	Serial port is available			
	Blinking	Data is being transmitted or received			
	ON but "Ready" LED is OFF	Device is in Console Mode			

### 1 Set Up Hardware

- 1. Connect RJ45 first. DHCP is enabled by default.
- 2. Power the device.
- Note: included 12Vdc wall adapter power supply recommended.
- 3. Connect the Serial Device.
  - \_RS-232 with DB9: straight-through for DCE device.
  - \_Null modem for DTE device.
  - \_RS-422/485 with terminal blocks.

### 2 Install/Setup

1. Use included CD to install Vlinx Serial Server Manager. If Autorun does not start, go to "My Computer" and select the CD drive. You will see a Vlinx VESR icon. Double-click it to launch the installation.

2. Click "Login". Password is blank from factory. No password is necessary to operate the VESR unit. The Configuration/General page appears.

### 3 Set Up Network

"I want DHCP" is preselected to set up the network using dynamic IP addressing. The gateway is set up at the factory to receive an IP assignment from a DHCP Server.

- 1. If a DHCP Server is not available on your network, it will default to 169.254.102.39.
- 2. If a DHCP server is not available and the default address does not work on your PC, change your PC network settings to IP Address: 169.254.102.1, Subnet Mask: 255.255.0.0, Default Gateway: 169.254.102.100.

#### 4 Setting Up Your Device

1. Port Settings: Four configurations are available: TCP, UDP, VCOM Mode and Paired Mode. TCP is the most common choice, and will be briefly described below.

(Paired Mode uses the same settings as TCP.) Detailed information about UDP and VCOM Mode may be found in the user's manual.

#### 2. TCP Port Settings:

- Choose "TCP".
- Choose either "server" or "client."
- Enter the port number on which you want to "wait for connections."
- Enter the maximum number of desired connections.
- Specify who is permitted to connect.

Depending on the Mode selected, there may be advanced functions available. Option is grayed out for VCom Mode.

### 5 Set Up Serial Port

Note: Serial settings are grayed out when VCom Mode is selected.

- 1. Change the description of the serial port if needed.
- 2. Set the mode to RS-232, RS-422 (4-wire), RS-485 (2-wire) or RS-485 (4-wire).
- 3. Set the Baud Rate to control the speed of the port. Valid rates range between 75 and 230.4k bits per second.
- 4. Set Data Bits. Options are from 5 to 8 Data Bits. 8 is most common and is the default.
- 5. Set Stop Bits. Stop Bits controls the number of bits for end of character.
- 6. Parity controls the error checking mode, with options of: No Parity, Odd, Even, Mark and Space.
- 7. "Flow Control" options are Hardware or Software or None. Hardware is used for RS-232 only.





#### RS-485 DB9 Male Pinout

DB-9M Pin	RS-232	Direction (RS-232)	RS-422/485 4-wire	RS-485 2-wire		
1	DCD	Input	RDA (-)	-		
2	RD	Input	RDB (+)	-		
3	TC	Output	TDB (+)	Data B (+)		
4	DTR	Output	TDA (-)	Data A (-)		
5	GND	Output	GND	GND		
6	DSR	Input	_	-		
7	RTS	Output	_	_		
8	CTS	Input	_	-		
9	_	_	_	_		