5 | Set Up Serial Port

Note: The Vlinx™ Serial Server Manager software contains default parameter values that are common to most Modbus networks.

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. **Stop Bits** controls the number of bits for end of character.
5. **Parity** controls the error checking mode, with options of No Parity, Odd, Even, Mark and Space.

6 | Finish and Log Out

There are additional configuration pages that may be accessed by selecting **Next** at the bottom of each page or by selecting the desired page from the vertical list in the left-hand column.

The Vlinx Serial Server Manager defaults to options like "Network" and "I don't know the IP of the device." If the defaults meet your needs, you do not need to set or change them.

If you have completed the configuration, click **Save** to save the configuration to the serial server. Allow 15 seconds for the Serial Server to reboot.

Click **Connect**. You should see a list of all devices on the network, including your new device. If you do not see your new device, please refer to the Troubleshooting tips.

You may now log out.

7 | Troubleshooting

The primary check for correct operation is the device LEDs.

For advanced information, see the Configuration Manager menu, at the top of Vlinx Serial Server Manager screen.

Select Diagnostic for a check of communications status with attached VESR321 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 that you can send your configuration files to B+B Tech Support for review.

Mode Switch	Result
Hold in for 0 to 2 seconds	Initiates a Hardware Reset
Hold in for 2 to 10 seconds	Enters Console Mode
Hold in for over 10 seconds	Reset to Factory Defaults

+ Recommended Accessories

MDR-20-24
Power Supply

DFMM-LCLC-xx
Fiber Cable

Ethernet Cables

B+B SMARTWORX

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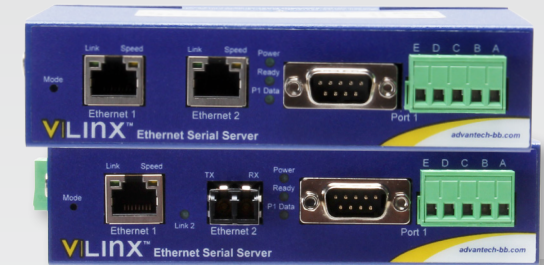**1-888-948-2248** | Europe: **+353 91 792444**

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+ QUICK START GUIDE

VESR321 Series

Isolated Industrial
Ethernet to Serial Servers

Before you begin, be sure you have the following:

+ VESR321x
+ CD with Software and Manuals
+ Mounting Accessories Kit

Additional items required but not included:
- ☐ Ethernet cables(s)
- ☐ Null modem cables(s)
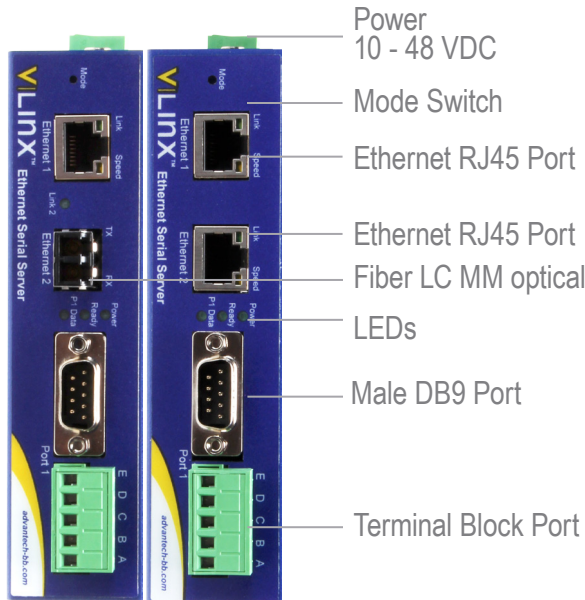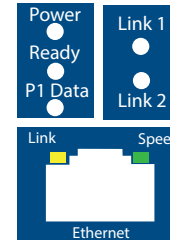- ☐ Power supply for terminal block or barrel connector

B+B SMARTWORX

Powered by **ADVANTECH**

Fast and easy on the web: **www.advantech-bb.com**

Product Overview

Power
10 - 48 VDC

Mode Switch

Ethernet RJ45 Port

Ethernet RJ45 Port

Fiber LC MM optical

LEDs

Male DB9 Port

Terminal Block Port

DB9 Male DTE

Signal Ground

DTR (Output)

TD (Output)

RD (Input)

DCD (Input)

No Connection

CTS (Input)

RTS (Output)

DSR (Input)

5 — 9
4 — 8
3 — 7
2 — 6
1

	RS-422/485 4-Wire	RS-485 2-Wire
E	GND	GND
D	RDB(+)	--------
C	RDA(-)	--------
B	TDB(+)	Data B(+)
A	TDA(-)	Data A(-)

LEDs

LEDs		
POWER	OFF	Power is not connected
	On	Power is connected
READY	OFF	System is in Console Mode
	BLINK	System is in Normal Mode
P1 DATA	ON	Serial Port is available
	BLINK	Data is present on serial port
RJ45 Ethernet Port LEDs		
SPEED	OFF	10BaseT connection
	ON	100BaseTX connection
LINK	ON	Ethernet connected
	BLINK	Data present on Ethernet port
Fiber Ethernet Port LEDs		
LINK	OFF	No connection
	ON	100BaseFX connection

Power
Ready
P1 Data
Link 1
Link 2

Link
Speed
Ethernet

1 | Set Up Hardware

1. Power the device.
2. Connect an RJ45 or optical connector to a network drop using a standard network cable. (The RJ45 ports on the model shown are interchangeable. One may used for pass-through Ethernet.)
3. Connect the Serial Device(s). 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. To open Vlinx Serial Server Manager, click **Start/ Programs/B&B Electronics/Vlinx/Vlinx Serial Server Manager/Serial Server Manager**. If the device does not connect, cycle (unplug-replug) the power, then try again.
3. To configure via the network, select **Network**.
4. If you know the IP address, select *"The device is at this address,"* and type in the IP address. If not, select *"I don't know the IP address of the device."* Click Connect.

(Alternative Method: Open a web browser and type the IP address of the serial server in the address bar. When the serial server is found, the Login window will appear.)

5. 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.

If you are not able to use these settings in your installation, refer to the User's Manual for directions to change the Serial Server's TCP/IP settings.

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.