

# Quick Start Guide

## Model: VESR4x4 series



## 1 Install/Connect the Hardware

- Unpack your serial server from the shipping container. Verify that all included items are present:

- Vlinx VESR4x4 module
- CD with Vlinx Manager software and user's manual
- (2) panel mount adapters and (4) mounting screws
- DIN rail mount adapter and (3) mounting screws
- This quick start guide



- Mount the serial server using panel or DIN rail mount adapters.
- Connect a 10 to 58 VDC power supply (6.0 W required).
- Connect to the network (using a standard Ethernet cable or fiber-optic cable):
- Connect the serial device (using the appropriate cable for your model):
  - RS-232 with DB9: straight-through for DCE device, null modem for DTE device
  - RS-232/422/485 with terminal blocks



## 2

## Install/Run Vlinx Manager

- **Install Vlinx Manager**
  - Insert the Vlinx manager software CD into the computer. The install program should automatically run.
  - Follow the prompts to install the software
- **RunVlinx Manager:**
  - Click Start>Programs>B&BElectronics>Vlinx>Vlinx Manager>VESRSerial Server
  - The Discovery page opens.



- Select Network.
- If you know the IP address, select: "The device is at this address", and type in the address.
- If not, select "I don't know the IP address of the device".
- Click on the Connect button. Vlinx Manager will search for any serial servers on the network.



- **Login to the Serial Server**
  - Select the serial server from the list.
  - Login to the device (factory password is blank. Just click Login). The General setup page will appear.

## 3

## Configure the Serial Server

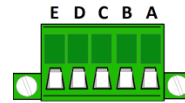
- **General Setup**
  - Enter a name for the serial server. This name will show up in the serial server list in Vlinx Manager.
  - Change the login password if desired.
- **Enter The Network Settings**
  - The serial server is configured at the factory to get an IP address automatically (DHCP). If a DHCP server is not available on your network, it will default to **169.254.102.39**.
  - If a static IP is desired, uncheck the box "I want DHCP to setup the network". Enter the static IP, Subnet Mask, and default Gateway information.
- **Setup the Serial Port Communications**
  - For each serial port on the device: Select the communications mode – RS-232, RS-422, RS-485 (2-wire), RS-485 (4-wire)
  - Select the communications parameters (Baud Rate, Data Bits, Stop Bits, Parity and Flow Control) for your serial device
- **Setup the Serial Port Network Protocol**
  - Select the type of network protocol you want to use for each port: TCP, UDP, VCOM or Paired Mode.
  - **TCP:** select whether the serial server will operate as a Client or Server, then configure the required IP address, port numbers and other related parameters.
  - **UDP:** configure the IP addresses, ports and other related parameters for the devices you want to receive data from and send data to.
  - **VCOM:** configure the serial port to act as a virtual COM port on the PC. You must also add the VCOM driver to the PC using the "Add" button in Vlinx Manager.
  - **Paired Mode:** configure the serial server to be paired with another serial server, configure it as either the client or the server in the pair and set up the IP address, port numbers, etc.
  - Setup **Advanced parameters** as necessary for your application. Click on the "Advanced" button to setup serial and network timers and packet delimiters.
- **Save your configuration to the serial server**
  - The device will re-boot after saving the settings.

# 4

## Test and Verify Operation

- Set up serial server as a TCP Server on serial port 1.
- Set serial port to RS-232 on serial port 1.
- Set to 9600 8-N-1 on serial port 1.
- Loopback serial port 1 by connecting TD to RD.
- Open a command window and type "telnet x.x.x.yyyy" where x.x.x.x is the IP address of the serial server and yyyy is the port number of the serial port.
- Type characters on the keyboard. The characters should appear in the window. If not, double check your settings.

## Serial Port Pinout – Terminal Blk



Terminal	RS-232	RS-422	RS-485
A	RTS	TDA(-)	Data A (-)
B	TD	TDB(+)	Data B (+)
C	CTS	RDA(-)	---
D	RD	RDB(+)	---
E	GND	GND	GND

## Serial Port Pinout - DB-9



Terminal	RS-232	RS-422/RS-485 4-wire	RS-485 2-wire
1	DCD	RDA(-)	---
2	RD	RDB(+)	---
3	TD	TDB (+)	Data B (+)
4	DTR	TDA (-)	Data A (-)
5	GND	GND	GND
6	DSR	---	---
7	RTS	---	---
8	CTS	---	---
9	---	---	---

## LED Status Indicators

LED	Color	Status
Power	Green	On =Power connected
Ready	Green	On = Initialization Flashing Slowly = Normal Operation Flashing Quickly = Device Re-booting
Speed	Yellow	On = 100Mbps Off = 10Mbps
Link	Green	On = Ethernet Connected Flashing = Data TX/RX
Serial Ports 1, 2, 3, 4	Green	On = Serial Port Open Flashing = Data TX/RX

## Reset Switch Operation

Hold in Reset (mode) switch for...	Result
0 to 2 seconds	Initiates a Hardware Reset
2 to 10 seconds	Enters Console Mode
More than 10 seconds	Resets to Factory Defaults

## Specifications

Power Supply	Voltage Requirements	10 to 58 VDC
	Power Consumption	6.0 watts maximum
Environment	Operating Temp.	-40 to 80 °C (-40 to 176 °F)
	Storage Temp.	-40 to 85 °C (-40 to 185 °F)
	Operating Humidity	10 to 95% non-condensing
Certifications	Ambient Surrounding Air Temperature	80 °C (maximum)
	FCC CE	Part 15 Class A
	NEMA TS2	
Enclosure	Rating	IP30
	Mounting	DIN rail mount (35 mm)
	Dimensions	1.8 x 4.4 x 6.75 in (4.57 x 12.2 x 17.1 cm)
Terminal Blocks	Wire Size	28 to 16 AWG
	Wire Type	Copper Wire Only
	Tightening Torque	5 KG-CM
Terminal Blocks	Wire Temp Rating	105 °C Minimum
	Note:	Sized for 60 °C Ampacity One Conductor Per Terminal

## UL Class 1 Division 2 Installation Information

**SUITABLE FOR USE IN CLASS 1, DIVISION 2 GROUPS A, B, C, AND D HAZARDOUS LOCATIONS, OR NONHAZARDOUS LOCATIONS ONLY.**

**WARNING – EXPLOSION HAZARD – SUBSTITUTION OF ANY COMPONENT MAY IMPAIR SUITABILITY FOR CLASS 1, DIVISION 2.**

The unit is to be powered by a Class 2 power source, of a grounded-type, when power is applied to the barrel connector.

Power cannot be applied to both the terminal block and barrel connectors simultaneously.

The use of coaxial cable for the field wiring in accordance with Class 2/Class 3 requirements in Article 725 of the NEC.