Quick Start Guide

Vlinx VESR9xx Serial



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Check for All Required Hardware

- Vlinx VESR9xx module
- □ This Quick Start Guide
- □ CD with Vlinx Manager s/w and manuals
- Network cable (not included)
- Serial cable(s) (not included)
- 10 to 48V DC (6.0W) Power Supply (not included)

Install the Hardware

- Connect a 10 to 48 VDC (58 VDC Max) power supply (6.0 W required).
- Connect the network cable from the serial server to a network drop using a standard network cable.
- □ Connect the serial device(s):
 - RS-232 with DB9: straight-through for DCE device, null modem for DTE device
 - RS-232/422/485 with terminal blocks: see Appendix D for pinouts

UL Installation Information

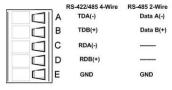
- One Conductor Per Terminal
- Use Copper Wire Only
- •Wire Size: 28 to 16 AWG
- Tightening Torque: 5 KG-CM
- Wire Temperature Rating: 105 C Minimum (Sized for 60 C Ampacity)
- •80 C Maximum Surrounding Ambient Air Temperature

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.



Models with Single Terminal Block for Data (See Manual for DB9 Pins)



Power Supply 10 to 48 VDC

Models With Dual Terminal Block for Data

RS-422/485 4-Wire		RS-485 2-Wire	RS-232
Α	TDA(-)	Data A(-)	RTS (Output
В	TDB(+)	Data B(+)	TD (Output)
С	RDA(-)		CTS (Input)
D	RDB(+)		RD (Input)
E	GND	GND	GND

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LED Status

LED	STATUS
Ready	Blinks if system is operating correctly
Port 1	On indicates serial port open, blinks when data present on serial port
Port 2	Same as Port 1 (Present on 2 port units only)
Link	On indicates Ethernet operating in 100BaseTX, blinks when data present on Ethernet link



Mode Switch

Hold in 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	



Install Vlinx Manager Software

- Insert the included CD and it should autostart
- □ Follow the prompts to install the Vlinx Manager

Note: Be sure you have administrative rights & disable firewalls.



Setup Vlinx Manager Software

- □ Open Vlinx Manager: click
 Start→Programs→B&B
 Electronics→Vlinx→Vlinx Manager→VESR
 Serial Server
- □ The Discovery page opens



- To configure via the network, 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 Connect.

OR...Setup the Web Interface

- Open a browser and type the IP address of the serial server in the Address Bar.
- ☐ When the serial server is found, the Configuration window appears.



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- Click Login. (Password is blank from factory)
- The General page appears.



Setup the Network

- The serial server is set at the factory to receive an IP assignment from a DHCP Server. If a DHCP server is not available on your network, it will default to <u>169.254.102.39</u>.
- If this address does not work with your PC, change your network settings to:
 - IP Address = 169.254.102.1
 - Subnet Mask = 255.255.255.0
 - Default Gateway = 169.254.102.100
- ☐ If you need to use different settings, refer to Chapter 4 of the Users Manual for instructions.

Setup the Serial Port Parameters

- Click Port 1 Serial to open the Serial Port Parameters page. Select the type of serial connection between the serial server and the serial device. (RS-232, RS-422, RS-485 2-wire, or RS-485 4-wire)
- Select the Baud Rate, Data Bits, Stop Bits, Parity and Flow Control needed to communicate with the serial device.
- If your serial server is 2 port, select the next port in the Description box, then repeat the previous steps.
- Click Next.



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Setup the Port Network Parameters

- Click Port 1 Network to open the Port Network Parameters page.
- □ Select the type of network protocol you want to use: TCP, UDP, VCOM or Paired Mode.
- If you select 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.
- If you select UDP, configure the IP addresses, ports and other related parameters for the devices you want to receive from and send to.
- if you want the serial server to act as a virtual communications port for a computer, select VCOM. This allows your computer to connect to a serial device on the network as if it were connected to a physical COM port.
- If you want the serial server to operate in Paired mode with another serial server, select Paired, then configure it as a client or server and set up the IP address, port numbers and other related parameters (similar to setting up TCP).



Setup Advanced Parameters

- If you want to set up Advanced parameters, click Advanced on the Port Network Parameters page.
- If necessary for your application, select I want to control when connections are forced closed, then set up the Network Watchdog and Serial Watchdog as required.
- If necessary for your application, select I want to control data packets are sent over the network, then set up the Character Count, Forced Transmit, Intercharacter Timeout, Delimiters and Delimiter Removal as required.
- Click Next.



Save and Logout

- If you have completed the configuration, click Save to save the configuration to the serial server.
- □ To Logout, click the Logout button.





To 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 DOS window and type "telnet x.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.