

6 | Finish and Log Out

There are additional Modbus 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 Modbus Gateway 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 gateway 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 section. You may now log out.

7 | Troubleshooting Tips

The primary check for correct operation is the device LEDs.

For advanced information, see the Configuration Manager menu, at the top of Vlinx Modbus Gateway screen.

Select **Diagnostic** for a check of communications status with attached BB-MESP211T device/s; 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.

Select **Monitor** to review activity logs of attached BB-MESP211T device/s, then select the device for which logged information is needed.

Logged information includes: Time, Source & Destination, Type of Event, Subscriber ID, Data Collected, and Information the Vlinx™ Modbus Gateway Manager program has gathered since current login of the affected device.

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

8 | 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 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

advantech.com

707 Dayton Road | PO Box 1040 | Ottawa, IL 61350
Phone: 10(815) 433-5100 | F ax: 10(815) 433-5109
www.advantech.com | E-mail: support@advantech-bb.com

+ QUICK START GUIDE



Model BB-MESP211T

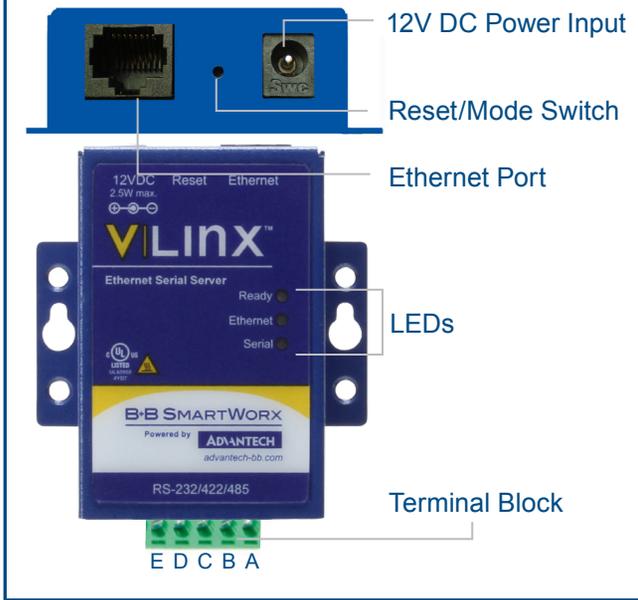
Ultra Compact Modbus
Ethernet to Serial Gateway

Before you begin, be
sure you have the following:

- + BB-MESP211T Ethernet/Serial Gateway
- + CD with software and manuals
- + 12Vdc wall adapter power supply

ADVANTECH

Product Overview



Terminal Block Pinout				
Pin	RS-232	Direction (RS-232)	RS-422/RS-485 4W	RS-485 2W
A	RTS	Output	TDA (-)	Data A (-)
B	TD	Output	TDB (+)	Data B (+)
C	CTS	Input	RDA (-)	****
D	RD	Input	RDB (+)	****
E	GND	****	GND	GND

LEDs		
Ready	OFF	Unit not ready or Unit is in Console Mode
	ON	During normal boot up
	BLINK	Slow Blink = Normal Operation Fast Blink = Device is Rebooting
Ethernet	OFF	No network link
	ON	Network link
	BLINK	Network activity
Serial	OFF	No serial port activity
	ON	Console Mode
	BLINK	Data is being transmitted or received

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.

2 | Install/Setup

1. Use included CD to install Vlinx™ Modbus Gateway Manager. If Autorun does not start, go to “My Computer” and select the CD drive.

_To start the installation on a 32-bit version of Windows, double-click on **CDROM:Windows32-Bit\MESR32.exe**

_To start the installation on a 64-bit version of Windows, double-click on **CDROM:Windows64-Bit\MESR64.exe**

2. To open Vlinx Modbus Gateway Manager, click **Start/Programs/B&B Electronics/Vlinx/Vlinx Modbus Gateway Manager/Modbus Gateway Manager.**
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.** If the device does not connect, cycle (unplug-replug) the power, then try again.

(Alternative Method: Open a web browser and type the IP address of the Modbus Gateway in the Address Bar. When the Modbus Gateway is found, the Login window will appear.)

5. Click **Login.** Password is blank from factory. No password is necessary.

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 manual for directions to change the Gateway’s TCP/IP settings.

4 | Setting Up TCP

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

1. TCP Settings:
“Connect to port” identifies TCP port used in TCP client mode. Valid range is 1 to 65535. Default is 502. Response timeout is the maximum response time. Valid range is from 1 to 65535. Default is 100 ms.
2. TCP Server Settings:
“Listen on port” identifies TCP port in TCP server mode. Valid range is from 1 to 65535. Default is 502.
“Limit the number of connections” controls the number of simultaneous TCP clients that can be connected.
Connection Filter Mode options like “allow everyone,” “allow specific IP address” and “allow a range of IP addresses” control which TCP clients can connect.

5 | Set Up Serial Port

Note: The Vlinx Modbus Gateway 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, 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 control 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.