

# Ultra Compact Modbus Gateway

Model BB-MESP211T

# ADVANTECH

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## FEATURES

- Connect Modbus devices to the Ethernet network
- RS-232/422/485 to Modbus TCP, ASCII, RTU (masters, slaves)
- Data rate: up to 230.4 kbps
- Remote monitoring, configuration, upgrades via web browser
- Wide operating temperature: -40 to +80 °C
- Compact IP30 metal enclosure is panel or DIN rail mount
- International 10-30 VDC power supply (included)

Model BB-MESP211T, Vlinx™ Modbus Gateway, connects Modbus devices to Ethernet networks and lets you monitor and control Modbus devices from anywhere on the Ethernet LAN or WAN. Supporting up to 16 masters and 32 slaves, the gateway features an auto-detecting 10/100 Ethernet copper RJ-45 port and a serial port that supports RS-232/422/485 communications via a removable terminal block connection.

The gateway is built for use in industrial environments with a heavy-duty metal enclosure that is panel (standard) or DIN rail mountable (with optional adapters). Power can be supplied with a 10 to 30 VDC power source and features a barrel connector. A power supply is included.

### Ease of Use

Configuration, upgrades and monitoring are easy with Vlinx Manager software. It installs on your PC giving access to the device on your desktop/laptop. Remotely manage the Modbus Gateway over a LAN/WAN via the built-in web server. This is helpful for off-site troubleshooting and can be done with an ordinary web browser.

### Software Support

Windows XP (32/64 bit), 2003 Server (32/64 bit), Vista 32/64 bit), 2008 Server (32/64 bit), 7 (32/64 bit), 8 (32/64 bit), 10 (32/64 bit).

## ORDERING INFORMATION

MODEL NUMBER	PROTOCOL	SERIAL PORT	ETHERNET PORT	ETHERNET CONNECTOR
BB-MESP211T	RS-232/422/485	Removable Terminal Block	1	RJ45

## ACCESSORIES - sold separately

**BB-SMI6-12-V-P5** - Included Power Supply, 12 VDC 6 Watt, 5MM Plug, International AC Input, International AC Blades

**BB-DRAD35** - Optional DIN rail adapter clip (pair)

**BB-232NM9** - Optional null modem crossover cable

**BB-TBKT2** - Replacement Terminal Block - 5-position, 5.08mm, 8A, 30

All product specifications are subject to change without notice.  
BB-MESP211T\_1019ds

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## SPECIFICATIONS

SERIAL TECHNOLOGY	
RS-232	TD, RD, DTR, DSR, RTS, CTS, DCD plus Signal Ground
RS-485 2-Wire	Data A(-), Data B(+), GND
RS-422/485 4-Wire	TDA(-), TDB(+), RDA(-), RDB(+), GND
Serial Protocols & Connectors	RS-232/422/485 (removeable terminal block)
Data Rate	Up to 230.4 Kbps
POWER	
Source	External power source (power supply included)
Input Voltage	10 to 30 VDC
Power Connector Dimensions	5.5 x 2.1 mm
Power Consumption	2.5 Watts, maximum
POWER SUPPLY (INCLUDED)	
Input Voltage	90 to 264 VAC
Frequency	47 to 63 Hz
Power Consumption	No load; Level VI = 0.1W; ErP Tier 1 = 0.075W
Operating Temperature	0 to +40 °C
Storage Temperature	-10 to +70 °C
Operating Humidity	20 to 80%
Storage Humidity	10 to 90%
Internation Blade Kit	North America, Europe, U.K., Australia, China, Japan
MECHANICAL	
LED Indicators	Serial Port, Ethernet, Ready
Switches	Reset Button
Dimensions	7.938 x 5.257 x 2.209 cm (3.125 x 2.070 x 0.870 in)
Enclosure	IP30, Metal
ENVIRONMENTAL	
Operating Temperature	-40 to +80 °C (-40 to +176 °F)
Operating Humidity	10 to 95% Non-condensing
MEANTIME BETWEEN FAILURES (MTBF)	
MTBF	1020400 hours
MTBF Calculation Method	MIL 217 F Parts Count Reliability Prediction

## SPECIFICATIONS- continued

NETWORK	
Serial Memory	8 KB per port
Network Memory	4 KB
LAN	10/100 Mbps auto-detecting, 10BaseT or 100BaseTX
Ethernet	IEEE 802.3 auto-detecting & auto MDI/MDI-X, 10BaseT & 100Base TX
PROTOCOLS	
Protocols	TCP, IPv4, UDP, ARP, HTTP 1.0, ICMP/PING, DHCP/BOOTP
IP Mode	Static, DHCP
TCP/UDP	User definable
UDP	Unicast or Multicast
OTHER	
Connection Mode	Server, Client, VCOM, Paired
Client Connection	At power up or upon data arrival
Search	Serial direct COM and Ethernet Auto Search or specific IP
Diagnostics	Display PC IP, ping, test VCOM
Firmware Upgrade	via Vlinx™ Manager
CONFIGURATION SOFTWARE	
Vlinx™ Manager	Windows XP (32/64), 2003 Server (32/64), Vista (32/64), 2008 Server (32/64), 7 (32/64), 8/8.1 (32/64), 10 (32/64)
REGULATORY	
UL	UL Listed (File E353510)
FCC	FCC Part 15 Class B
CE - Directives	2014/30/EU – Electromagnetic Compatibility Directive (EMC) 2014/35/EU – Low Voltage Directive 2011/65/EU – Reduction of Hazardous Substances Directive (RoHS) 2012/19/EU – Waste Electrical and Electronic Equipment (WEEE)
CE - Standards	EN55032 Class B – Electromagnetic Compatibility of Multimedia Equipment – Emission Requirements EN55024 – Information Technology Equipment - Immunity Characteristics – Limits of methods of measurement
CE - Safety	EN 60950-1 +A1 + A11 +A12 + A2

## MECHANICAL DIAGRAM - BB-MESP211T

