Ultra Compact Modbus Gateway

Model BB-MESP211T



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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
- 10-30Vdc power supply required and 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 Source (included)

The product requires and operates from a 10-30Vdc range of power inputs. It ships with an included AC wall power supply that features a universal AC input, barrel connector and interchangeable blades for North America, Europe, UK, Australia and China.

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 - Power supply, 12V DC, 6 Watt, 5mm plug, International AC input, International AC blades. *One power supply (this mode#) included with product.*

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

BB-232NM9 - Optional null modem crossover cable for DTE to DTE connection

BB-TBKT2 - Replacement terminal block, 5-position, 5.08mm, 8A, 30

All product specifications are subject to change without notice. BB-MESP211T_5119ds



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SPECIFICATIONS

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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			
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 FAILU	MEANTIME BETWEEN FAILURES (MTBF)			
MTBF	1020400 hours			
MTBF Calculation Method	MIL 217 F Parts Count Reliability Prediction			
POWER SOURCE - INCLUDED				
Included Power Supply	AC Wall Adapter Power Supply & international blade kit			
Output Voltage	12Vdc			
Output Current	0.5A, maximum			
Output Power	6W, maximum			
Ripple & Noise	200mVp-p, maximum			
Output Plug	Standard DC straight plug; 2.1mm barrel connector			
Input Voltage	90 to 264 V AC			
Frequency	47 to 63 Hz			
Power Connector Dimensions	5.5 x 2.1 mm			
Power Consumption	2.5 Watts, maximum No load; Level VI = 0.1W; ErP Tier 1 = 0.075W			
Operating Temperature	0 to +40 °C (+32 to +104 °F)			
Storage Temperature	-10 to +70 °C (-14 to +158 °F)			
Operating Humidity	20 to 80%			
Storage Humidity	10 to 90%			
International Blade Kit	North America, Europe, U.K., Australia, China, Japan			

SPECIFICATIONS- continued

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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 2015/863/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

