Ultra Compact Modbus Gateway
Model BB-MESP211T

ADVANTECH

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 model#) 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

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 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

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 UDP	User definable 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

5.257 cm
2.070 in

2.209 cm
0.870 in

7.303 cm
2.875 in

7.938 cm
3.125 in

8.890 cm
3.500 in