

# MESP211

## Vlinx™ Ultra Compact Modbus Gateways

- ✓ Modbus TCP Ethernet, Modbus ASCII & RTU RS-232/422/485
- ✓ Modbus Flexibility – Serial & Ethernet, Masters & Slaves
- ✓ View Messaging Status in Real Time
- ✓ Wide Operating Temperature (-40 to 80C)
- ✓ Wide Voltage input 10 to 30 VDC
- ✓ Ultra Compact IP30 Metal Enclosure
- ✓ Heavy industrial 61000-6-2 EMC Level 3 tested for harsh environments



Vlinx™ MESP211 series Modbus Gateways connect Modbus devices to Ethernet networks and let you monitor and control your Modbus devices from anywhere on the Ethernet LAN or WAN. Supporting up to 16 masters and 32 slaves, the gateways feature an auto-detecting 10/100 Ethernet copper RJ-45 port and a serial port that supports RS-232/422/485 communications via a DB9 male or a terminal block connection. The product is built for use in industrial environments, featuring a heavy duty metal enclosure that is panel (standard) or DIN rail mountable (with optional adapters). The product is supplied with a DC power source ranging from 10 to 30VDC and features a barrel connector.

### Ease of Use

Configuration, upgrades and monitoring of the serial server are simple, easy tasks with Vlinx Manager Software. It installs right on your PC giving you access the serial server via your desktop. Remotely manage the Modbus Gateway over a LAN or WAN via the built-in web server. This is helpful for off-site troubleshooting and can be done with a simple web browser.

### Specifications

Power		
Source	External power supply included	
Input Voltage	10 to 30 VDC	
Connector	Barrel connector 5.5 x 2.1mm	
Power Consumption	2.5 W	
Mechanical		
LED Indicators	Serial Port, Ethernet Link, Ready LEDs	
Switches	Reset Button	
Dimensions	3.1 x 0.9 x 2.0 (with ears 2.89) inches	
Enclosure	Metal, IP 30	
Environmental		
Operating Temperature	-40 to 80°C (-40 to 176° F)	
Operating Humidity	10 to 95% Non-condensing	
MTBF	186,310 hours	
MTBF Calc Method	Parts Count Reliability Prediction	
Network		
Serial Memory	8 KB per port	
Network Memory	4 KB	
IP Port Addresses	Setting in TCP Mode 8899	
LAN	10/100 Mbps Auto-detecting , 10BaseT or 100BaseTX	
Ethernet	IEEE 802.3 auto detecting & auto MDI/MDX, 10BaseT and 100Base TX	
Ordering Information		
Model	MESP211D	MESP211T
Serial port	RS-232/422/485	RS-232/422/485
Serial connector	DB9 Male	Removable terminal block
Ethernet port	1	1
Ethernet connector	RJ45	RJ45
Accessories		
MDR-40-24	Din Rail Mount, 24VDC, 40 W	
DRAD35	Din Rail Adapter Clip (pair)	
232NM9	Null Modem Crossover Cable	
TB5P508SR-2PK	Replacement terminal block for the MESP211T	

## Specifications

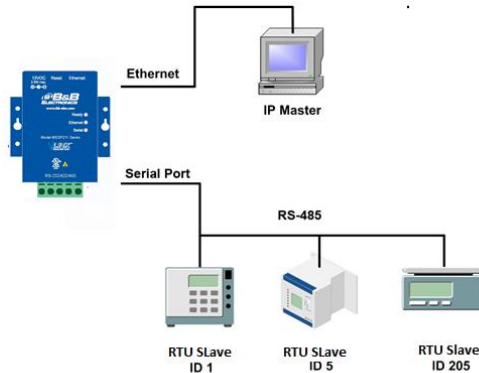
Serial Technology	
RS-232 (DB9)	TD, RD, DTR, DSR, RTS, CTS, DCD, Signal Ground
RS-232 (Terminal Block)	TD, RD, RTS, CTS, Signal Ground
RS-485 2-Wire	Data A(-), Data B(+), GND
RS-422/485 4-Wire	TDA(-), TDB(+), RDA(-), RDB(+), GND
Serial Connector	DB9M or Removable Terminal Blocks
Data Rate	Up to 230.4 Kbps
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	MODBUS RTU Master / Slave, MODBUS ASCII Master/Slave
Search	Serial direct COM and Ethernet Auto Search or specific IP
Diagnostics	Display PC IP, ping, save test config (text readable)
Firmware Upgrade	Firmware can be updated through the manager software
Modbus Monitor	The Manager Software has a Modbus Monitor feature
Configuration Software	
OS Compatibility	XP (32/64), Vista (32/64), Windows 7 (32/64), Windows 8 (32/64), Server 2003 (32/64), Server 2008 (32/64), Server 2012 (64)

Approvals / Certifications			
Emissions	FCC Class B, CISPR Class A (EN55022)		
CE	EN61000-6-2:2005	(Heavy Industrial)	
	EN61000-4-2:2008	(ESD)	+/-8kV Contact, +/-15kV Air
	EN61000-4-3:2006	(RI)	10V/m, 80-1000MHz; 3V/m, 1.3 to 2.7 GHz
	EN61000-4-4:2004	(EFT Burst)	+/-2kV DC ports; +/-1kV signal ports
	EN61000-4-5:2005	(Surge)	+/- 0.5 kV DC Ports, +/- 1 kV Signal Ports
	EN61000-4-6:2005	(CI)	10 VRMS, 0.15 to 80 MHz
	EN61000-4-8:2001	(Magnetic)	10A/m, 50Hz & 60Hz
Shock	IEC60068-2-27	50G peak, 11ms, 3 axes	
Vibration	IEC60068-2-6	10-500Hz, 4G, 3 axes	
Freefall (Drop)	IEC60068-2-32	10 total drops from sides, corner and edges, 1M	

# Application Examples

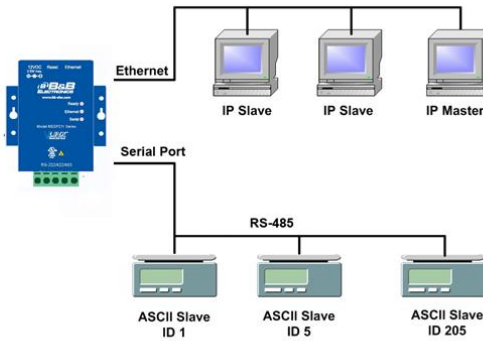
## Ethernet Master Serial Slaves

MESP211 Gateways can be used to integrate serial slave devices on a MODBUS TCP network. This allows TCP Masters to control serial slave devices.



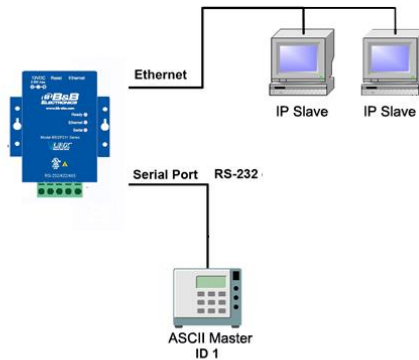
## Ethernet Masters, Serial & Ethernet Slaves

MESP211 Gateways can be used to integrate multiple master devices onto serial and Ethernet networks.

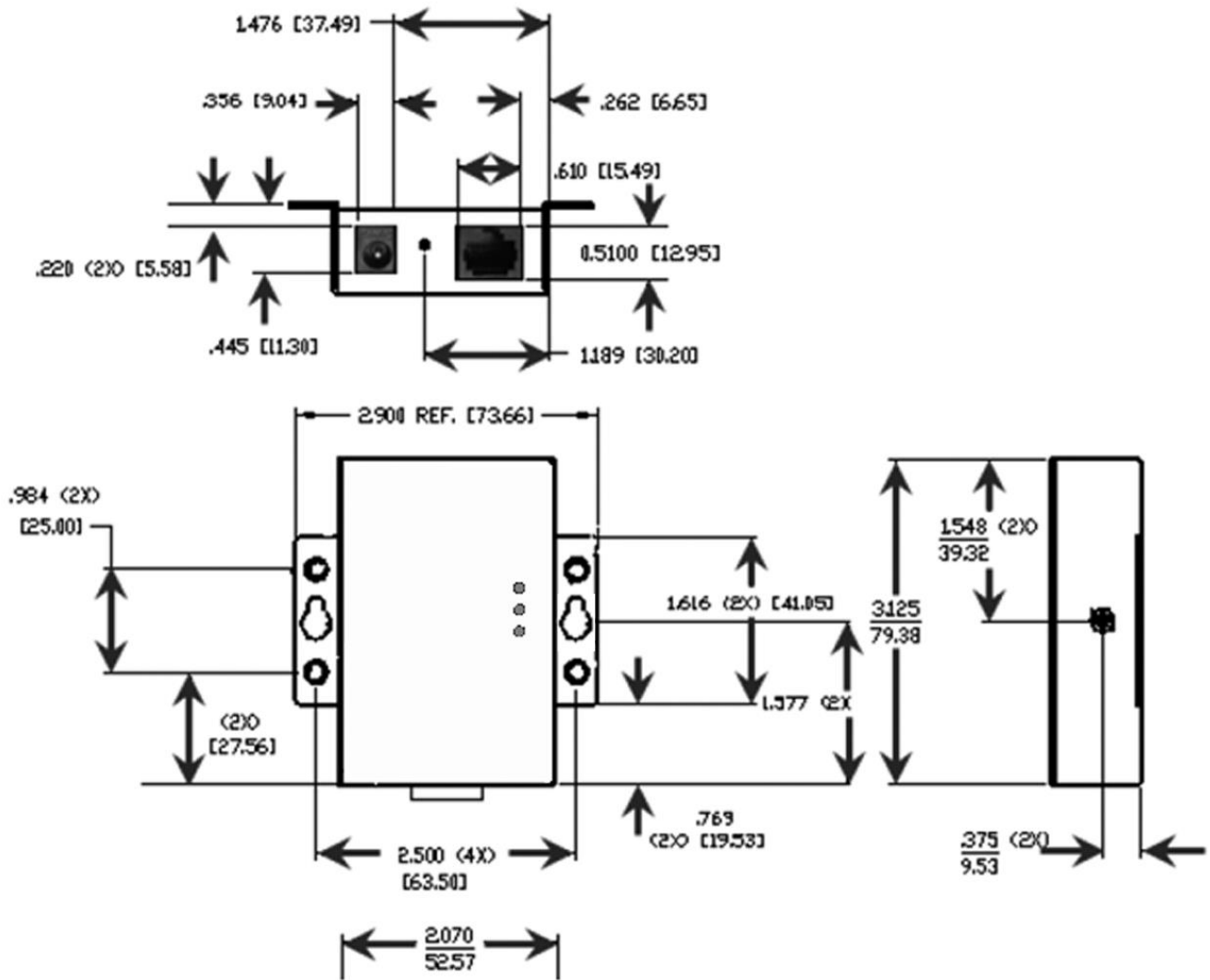


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## Mechanical Diagram



*Dimensional Diagram of an MESP211 Serial Server (dimensions in inches & millimeters)*