



MES1A

MES1B

Models: MES1A, MES1B

## Ethernet Enable Modbus Serial Ports on Industrial Equipment

with Modbus Ethernet Serial Servers

### Features

- Converts Modbus ASCII/RTU to Modbus/TCP
- Small, economical and configurable
- Modbus Master and Modbus Slave operation
- DIN rail & panel mount options
- Connection of up to 32 serial modbus devices (MES1B)
- CE approved

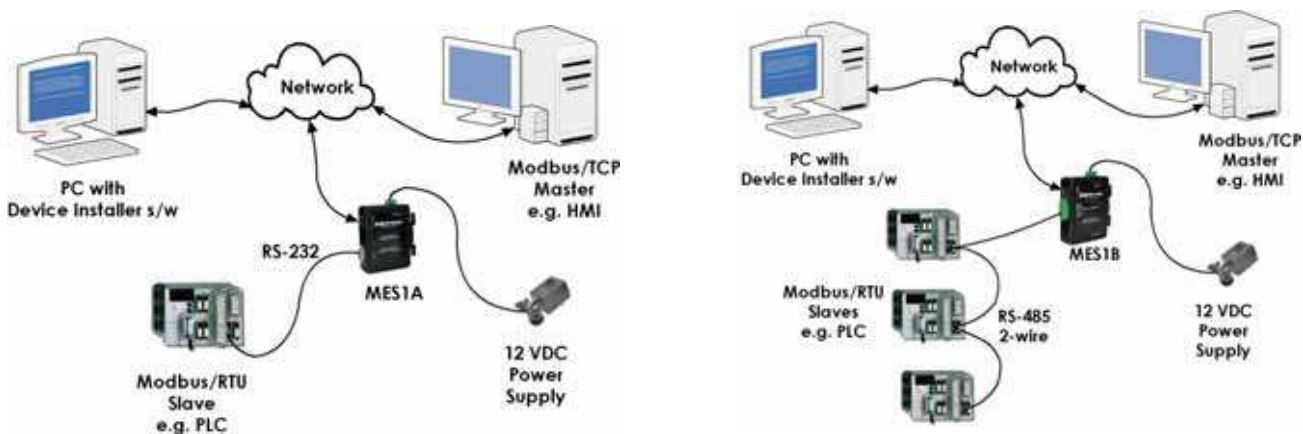
MES1A and MES1B Modbus TCP to Modbus ASCII/RTU converters are easy-to-use, cost-effective solutions for connecting new and existing Modbus ASCII/RTU serial devices to TCP/IP networks. The MES1A provides this connection for Modbus devices with RS-232 interfaces; the MES1B facilitates Modbus devices with RS-422 four-wire point-to-point interfaces, or RS-485 four or two-wire multi-drop bus connections.

MES1A and MES1B are flexible devices that allow for many different modbus network configurations.

1. Modbus ASCII/RTU slave devices can communicate over a TCP/IP network to Modbus TCP/IP masters.
2. Modbus ASCII/RTU master devices can communicate over TCP/IP networks to modbus ASCII/RTU master devices
3. Modbus ASCII/RTU slave devices can communicate over a TCP/IP network to other modbus ASCII/RTU devices.  
In this mode 2 devices are required to allow the modbus serial protocol to tunnel over a TCP/IP network.

Through the use of both panel and DIN rail mounting options and support for screw terminal block interfaces for both power and serial, MES1B is designed to meet a variety of industrial applications.

### Typical Network Configurations



**B & B electronics**  
MANUFACTURING COMPANY

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## Specifications

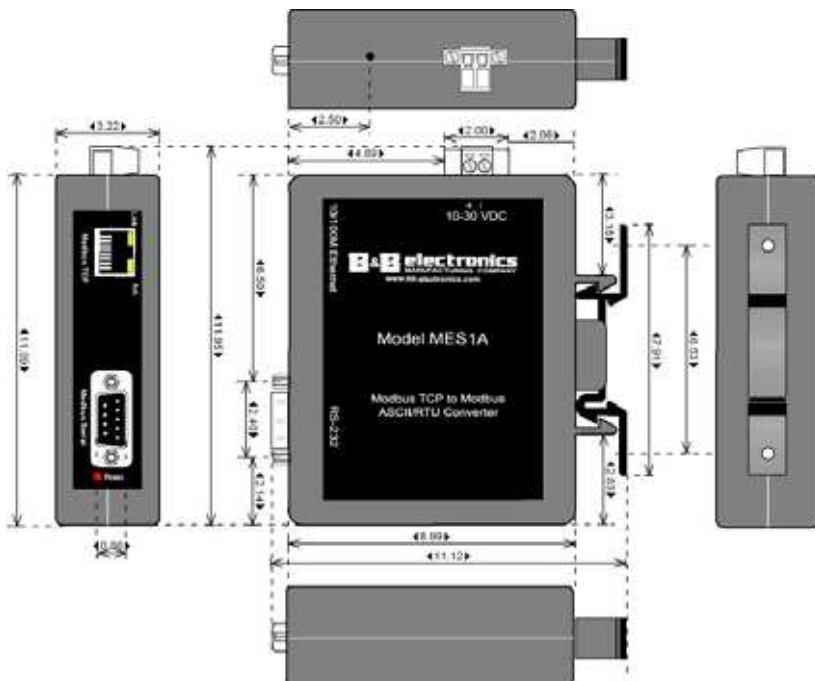
- 10-30 VDC power input with removable terminal blocks
- Serial connections: MES1A: DB9; MES1B: terminal block
- Auto detecting 10/100 Mbps Ethernet RJ-45 port
- LED indicator provides at-a-glance operation
- Configuration via telnet console
- Password protected
- Operating temperature: -20 to 80 C°

<b>Models:</b>	MES1A, MES1B
<b>Manual:</b>	Paper copy of this manual, PDF available
<b>CD-ROM disc:</b>	XPort Device Installer software; PDF of MES1A/MES1B User Manual; PDF of Quick Start guide
<b>Operating Systems Supported</b>	Windows 98/ME/2000/XP/NT 4.0 (call B&B Tech Support for other operating systems)
<b>Dimensions</b>	MES1A/MES1B – 1.25 x 4.5 x 4.75 in (3.2 x 11.3 x 12.2 cm)
<b>Power Supply Requirements:</b>	10 VDC to 30VDC @ 3.6W
<b>Power Supply:</b>	Not included
<b>Power Connector:</b>	Removable screw terminal (2) block with screw down
<b>Power Consumption:</b>	12VDC @ 300 mA
<b>Operating Temperature:</b>	-20 to 80 °C (-4 to 176 °F)
<b>Storage Temperature:</b>	-40 to 85 °C (-40 to 185 °F)
<b>Humidity:</b>	10% to 90% R.H. non-condensing
<b>Approvals:</b>	CE, FCC Class B
<b>Link Integrity Indicator:</b>	Green/Orange LED (on Ethernet connector)
<b>Activity Indicator:</b>	Green/Orange LED (on Ethernet connector)
<b>Power Indicator:</b>	Red LED
<b>Reset Switch</b>	Recessed momentary switch, press for 1 second to reboot (hardware reset)
<b>Ethernet Connector:</b>	Single RJ-45 female (with built-in LED indicators)
<b>Ethernet Standards Supported:</b>	IEEE 802.3 10/100 Mbps auto-detecting, 10BaseT, 100BaseTX
<b>Protocols Supported:</b>	TCP, UDP, DHCP, SNMP, TELNET, ICMP, ARP, TFTP, Modbus ASCII, Modbus RTU, Modbus/TCP
<b>Serial Protection:</b>	12V TVS for MES1A; 5 V TVS for MES1B
<b>Serial Connector:</b>	MES1A - 9 pin D-type male (DB-9M) MES1B – removable screw terminal (5) block with screw down
<b>Interface Lines Supported:</b>	MES1A – RS-232 TD, RD, GND MES1B – RS-422/485 TDA(-), TDB(+), RDA(-), RDB(+), GND
<b>Serial Data Rates:</b>	300, 600, 1200, 2400, 3600, 4800, 9600, 19200, 38400, 57600, 115200 bps
<b>Parity:</b>	None, Even, Odd
<b>Data Bits:</b>	7 or 8
<b>Stop Bits:</b>	1, 2
<b>Flow Control:</b>	None
<b>Configuration Modes:</b>	Telnet, XPort Device Installer with integrated Telnet
<b>Device Management:</b>	SNMP – RFC 1213/1215/1316/131
<b>IP Address Assignment:</b>	Static IP or DHCP (IP is set to 0.0.0.0)
<b>Accessories:</b>	DIN/Panel mount bracket

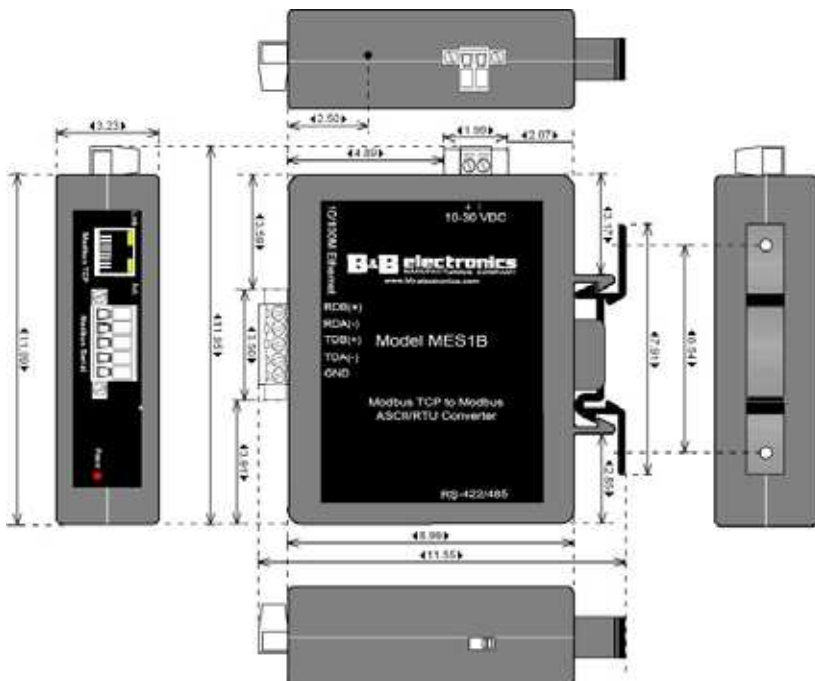


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Dimensional Diagram of the MES1A



Dimensional Diagram of the MES1B



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**DECLARATION OF CONFORMITY**

Manufacturer's Name: B&B Electronics Manufacturing Company  
Manufacturer's Address: P.O. Box 1040  
707 Dayton Road  
Ottawa, IL 61350 USA  
Model Numbers: ESR901WB  
Description: 1 Port 802.11b Wireless Serial Server  
Type: Light industrial ITE equipment  
Application of Council Directive: 89/336/EEC  
Standards: EN 55022  
EN 61000-6-1  
EN 61000 (-4-2, -4-3, -4-4, -4-5, -4-6, -4-8, -4-11)



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