

# Boxer

## Single Port Modbus Gateway

BMM-101

### Overview

The BMM-101 is a single-port Modbus gateway which is designed for applications to allow the legacy MODBUS RTU/ASCII devices to operate on a MODBUS TCP network. It allows either MODBUS serial master or slave to communicate with MODBUS TCP's slave or master.

BMM-101 allows multiple MODBUS TCP masters to communicate with a MODBUS serial network. Since MODBUS serial network can only handle one query at one time, queries from different masters are pipelined and processed one by one. When BMM-101 functions as MODBUS RTU/ASCII master to MODBUS TCP slave gateway, the device can connect up to 8 MODBUS TCP slave. User can specify a UID range for each MODBUS TCP slave.



### Key Features

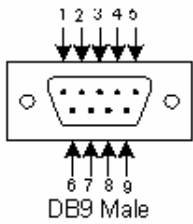
#### ● Industrial Conformance

- DIN rail or Panel mount.
- Supports 10/100 Mbps Ethernet.
- Supports RS-232, RS-422, and RS-485 serial interface.
- Supports LAN and WAN communications.
- Management access password protected.
- Supports up to 8 MODBUS TCP master to MODBUS RTU/ASCII. Queries from different masters are pipelined and handled independently without disrupt each other.
- Supports MODBUS RTU/ASCII master to link up to 8 MODBUS TCP clients.
- Supports inactive timeout to shutdown connection for allowing accepting next connection.
- Supports loop back mode. Data is echoed back for easily testing the connection.

### Mechanical Dimension (in mm)



## Pin Assignment



DB9 M Pin	RS232	RS422	RS485
1	DCD	RX-	--
2	RXD	RX+	--
3	TXD	TX+	DATA+
4	DTR	TX-	DATA-
5	GND	GND	--
6	DSR	CTS-	--
7	RTS	CTS+	--
8	CTS	RTS+	--
9	RI	RTS-	--

## Specifications

### Serial Buffer:

**Output:** 64K bytes for BMM-101

**Input:** 8K bytes per port

### Serial Connection:

DTE – BD-9 male

### LAN:

10/100 Mbps Auto-detecting – 10 Base T,

100 Base TX

### Serial Interfaces:

**RS-232** - TX, RX, RTS, CTS, DTR, DSR, DCD, GND

**RS-422** – TX+, TX-, RX+, RX-, RTS+, RTS-, CTS+, CTS-, GND

**RS-485** - Data +, Data -, GND

### Data Rate:

110 bps to 230.4 k bps

### Parity:

none, even, odd, mark, space

### Data Bits:

5, 6, 7 or 8

### Stop Bits:

1, 1.5 or 2

### Protocol:

TCP, IP, ARP, DHCP, Telnet, HTTP, UDP, ICMP

### Management:

Manager software, Serial Console, Telnet, Web server

Firmware upgradeable

### Dimensions:

3.35 x 4.5 x 0.90 in (8.5 x 11.5 x 2.3 cm)

### Power Requirements:

9 ~15 VDC, 500 mA

### Operating Temperature:

-10 to 60 °C

### Storage Temperature:

-20 to 80 °C

### Humidity:

0 – 90% Non-Condensing

### Approvals:

CE, FCC

## Ordering Information

BMM-101 Single-port Modbus Gateway