

Single Port Modbus Gateway



BMM-101

Features

- ✓ High Performance Network Switching Technology
- ✓ 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
- ✓ 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
- ✓ Firmware upgradeable
- ✓ Robust Industrial Design
- ✓ Robust metal case
- ✓ Supports operating temperature 0 to 60°C
- ✓ Wall mount or DIN-Rail installation
- ✓ Reliable Power Design
- ✓ Wide power Input from 9-15 VDC
- ✓ External power adapter available different power plug standards



Overview

The Boxer series BMM-101 is a single port Modbus gateway. Modbus is one of the most popular protocols in Automation. Many industrial devices such as PLC, DCS, HMI, instruments, controllers, meters any other type of serial communication industrial equipment, use Modbus as a bridge for communication. BMM-101 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.

Hardware Specifications

Interface

Speed: 10/100 Mbps

Connector: 8-pin RJ-45

Serial Interface

Speed: 1 x RS-232/422/485 serial port

Connector: Male DB9

Power Requirements

Power Input: 9-15VDC

Power Consumption: 6 watts

Serial Communication Parameters

Baud Rate: 110 bps to 230.4 Kbps

Parity: None, Even, Odd, Mark, Space

Data Bit: 5, 6, 7, 8

Stop Bit: 1, 1.5, 2 bits

Flow Control: None, RTS/CTS, XON/OFF

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

RS-422 Interface: TX+, TX-, RX+, RX-, RTS+, RTS-, CTS+, CTS-, GND

RS-485 Interface: Data +, Data -, GND

Environmental

Operating Temp: 0 to 60°C

Storage Temp: -20 to 80°C (-4 to 176 °F)

Operating Humidity: 10% to 80% RH (non-condensing)

Technical Specifications

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

Management:

Manager software, Serial Console, Telnet, Web server

Firmware upgradeable

Regulatory Approvals

EMI: FCC Class A

EMS:

EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-11

Safety: CE/EN60950

Shock: IEC60068-2-27

Vibration: IEC60068-2-6

Free Fall: IEC60068-2-32

Environmental: WEEE, RoHS

MTBF: 300,000 hrs based on Mil-Hdbk-217F,GB

Warranty: 5 years