MOXA®

MGate MB3280
Quick Installation Guide

First Edition, August 2007

1. Overview

The MGate MB3280 is a 2-port Modbus gateway that converts between Modbus TCP and Modbus ASCII/RTU protocols. It can be used to allow Ethernet masters to control serial slaves, or to allow serial masters to control Ethernet slaves. Up to 16 TCP masters and 62 serial slaves can be connected simultaneously.

2. Package Checklist

Before installing the MGate MB3280, verify that the package contains the following items:

- 1 MGate MB3280 Modbus gateway
- Document & Software CD
- MGate MB3280 Quick Installation Guide
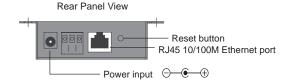- Product Warranty Statement

Optional Accessory

- DK-35A: DIN-rail mounting kit (35 mm)

Notify your sales representative if any of the above items is missing or damaged.

3. Hardware Introduction

As shown in the following figures, the MGate MB3280 has two serial ports with DB9 (male) connectors for transmitting serial data.
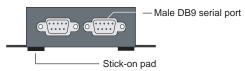
Rear Panel View

Reset button
RJ45 10/100M Ethernet port
Power input

Top Panel View

DIN-rail kit screw hole
Wallmount screw hole

Front Panel View

Male DB9 serial port
Stick-on pad

Reset Button

The reset button is used to load factory defaults. Using a pointed object such as a straightened paper clip, hold the reset button down for five seconds. Release the reset button when the Ready LED stops blinking.

LED Indicators

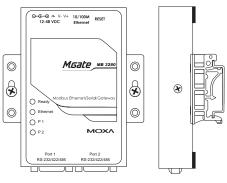| Name	Color	Function	
Ready	Red	On:	Power is on and unit is booting up
		Blinking:	IP conflict, DHCP/ BOOTP server did not respond properly, or relay output error occurred.
	Green	On:	Power is on and unit is functioning normally
		Blinking:	Unit is responding to Location function.
	Off	Power is off or power error condition exists	
Ethernet	Orange	10 Mbps Ethernet connection	
	Green	100 Mbps Ethernet connection	
	Off	Ethernet cable is disconnected or has a short	
P1/P2	Orange	Serial port is receiving data.	
	Green	Serial port is transmitting data.	
	Off	No data is being transmitted or received through the serial port.	

4. Hardware Installation Procedure

STEP 1: After unpacking the unit, connect the power adaptor or terminal block power input.

STEP 2: Use a standard straight-through Ethernet cable to connect the unit to a network hub or switch. Use a cross-over Ethernet cable if you are connecting the gateway directly to a PC.

STEP 3: Connect your device(s) to the serial port.

STEP 4: Place or mount the unit as desired. The unit may be placed on a horizontal surface such as a desktop, mounted on a DIN-rail, or mounted on the wall.

P/N: 1802032800010

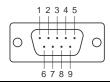**Wall Mounting**   **DIN-rail Mounting**

5. Software Installation

To install **MGate Manager**, insert the **MGate Document & Software CD** into your PC's CD-ROM drive. Once the MGate Installation CD window opens, click **Installation** and follow the on-screen instructions. For additional information about MGate Manager, click **Documents** and select the MGate MB3000 User's Manual.

6. Pin Assignments

Ethernet Port (RJ45)

Pin	Signals
1	Tx+
2	Tx-
3	Rx+
6	Rx-

Serial Port (Male DB9)

Pin	RS-232	RS-422/485 (4W)	RS-485 (2W)
1	DCD	TxD-(A)	---
2	RxD	TxD+(B)	---
3	TxD	RxD+(B)	Data+(B)
4	DTR	RxD-(A)	Data-(A)
5	GND	GND	GND
6	DSR	---	---
7	RTS	---	---
8	CTS	---	---
9	---	---	---

7. Environmental Specifications

Power Requirements

Power Input	12 to 48 VDC
Power Consumption	250 mA (max)
Operating Temperature	0 to 55°C (32 to 131°F)
Operating Humidity	5 to 95% RH
Dimensions (W x D x H)	100 × 116 × 22 mm ←with ears
	88 × 116 × 22 mm ←without ears