

# MGate MB3270 and MB3270I Quick Installation Guide

Third Edition, October 2007

## 1. Overview

The MGate MB3270 and MB3270I are 2-port advanced Modbus gateways that convert between Modbus TCP and Modbus ASCII/RTU protocols. They 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 MB3270 or MB3270I Modbus gateway, verify that the package contains the following items:

- MGate MB3270 or MB3270I Modbus gateway
- Document & Software CD
- MGate MB3270 and MB3270I Quick Installation Guide
- Product Warranty Statement

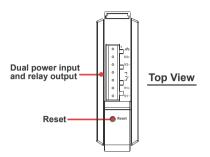
Please notify your sales representative if any of the above items is missing or damaged.

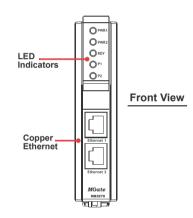
#### 3. Hardware Introduction

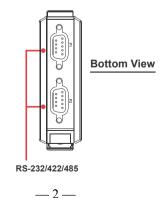
#### **LED Indicators**

Name	Color	Function			
PWR1	Red	Power is being supplied to the power input			
PWR2	Red	Power is being supplied to the power input			
RDY	Red	(steady) Power is on and the unit is booting up			
		(blinking) IP conflict, DHCP or BOOTP server did			
		not respond properly, or a relay output occurred			
	Green	(steady) Power is on and the unit is functioning			
		normally			
		(blinking) Unit is responding to Locate 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	Serial port is not transmitting or receiving data			

The MGate MB3270 and MB3270I each provide two DB9 ports to connect to serial devices.







**Reset Button** 

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

#### 4. Hardware Installation Procedure

STEP 1: Use a standard straight-through Ethernet cable to connect the MGate to a network hub or switch.

STEP 2: Connect your device to the MGate serial port.

STEP 3: Mount the MGate on a DIN-rail.

STEP 4: Connect the power source to power input.

#### 5. Software Installation Information

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

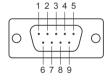
# 6. Pin Assignments

## Ethernet Port (RJ45)



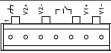
	Pin	Signals		
Ī	1	Tx+		
ſ	2	Tx-		
ſ	3	Rx+		
	6	Rx-		

## 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				

### **Power Input and Relay Output Pinouts**



/	V2+	V2-	<u> </u>		V1+	V1-
Shielded Ground	DC Power Input 1	DC Power Input 1	Relay output	Relay output	DC Power Input 2	DC Power Input 2

# 7. Specifications

**Power Requirements** 

Power Input 12 to 48 VDC

Power Consumption MB3270: 410 mA@12 VDC, 145 mA@48 VDC

MB3270I: 470 mA@12 VDC, 150 mA@48 VDC

Operating Temperature Standard: 0 to 55°C (32 to 131°F)

Wide Temp. Model: -40 to 75°C (-40 to 167°F)

Operating Humidity 5 to 95% RH

Dimensions  $29 \times 124.5 \times 89.2 \text{ mm}$ 



Click here for online support: www.moxa.com/support

The Americas: +1-714-528-6777 (toll-free: 1-888-669-2872)

Europe: +49-89-3 70 03 99-0 Asia-Pacific: +886-2-8919-1230

China: +86-21-5258-9955 (toll-free: 800-820-5036)

© 2008 Moxa Inc., all rights reserved. Reproduction without permission is prohibited.