



MGate 5101-PBM-MN

Quick Installation Guide

First Edition, August 2012

Overview

The MGate 5101-PBM-MN is an industrial Ethernet gateway for PROFIBUS and Modbus TCP network communication.

Package Checklist

Before installing the MGate 5101-PBM-MN, verify that the package contains the following items:

- 1 MGate 5101-PBM-MN gateway
- Documentation & Software CD
- Quick Installation Guide
- Product Warranty Statement

Optional Accessories:

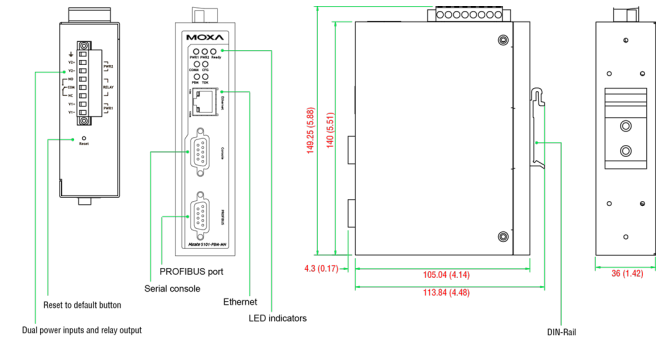
- DR-45-24: 45W/2A DIN-rail 24 VDC power supply with universal 85 to 264 VAC input.
- DR-75-24: 75W/3.2A DIN-rail 24 VDC power supply with universal 85 to 264 VAC input.
- DR-120-24: 120W/5A DIN-rail 24 VDC power supply with 88 to 132 VAC/176 to 264 VAC input by switch.
- WK-36-01: Wall mounting kit

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

Hardware Introduction

LED Indicators

LED	Color	Function
PWR1	Green	Power is on
	Off	Power is off
PWR2	Green	Power is on
	Off	Power is off
Ready	Green	Steady on: Power is on and the MGate is functioning normally Blinking: The MGate has been located by the MGate Manager's Location function
	Red	Steady on: Power is on and the MGate is booting up Blinking: Indicates an IP conflict, or DHCP or BOOTP server is not responding properly
	Off	Power is off or fault condition exists
COMM	Off	No data exchange
	Green	Data exchange with all slaves
	Green, flashing	Data exchange with at least one slave (not all configured slaves can communicate with gateway)
CFG	Red	Bus control error
	Off	No PROFIBUS configuration
PBM	Green	PROFIBUS configuration OK
	Off	PROFIBUS master is offline
	Red	PROFIBUS master is in STOP mode
TOK	Green, flashing	PROFIBUS master is in CLEAR mode
	Green	PROFIBUS master is in OPERATE mode
	Off	Gateway holds the PROFIBUS token
Ethernet	Off	Gateway is waiting for the PROFIBUS token
	Amber	Steady: 10Mbps, no data is transmitting Blinking: 10Mbps, data is transmitting
	Green	Steady: 100Mbps, no data is transmitting Blinking: 100Mbps, data is transmitting
	Off	Ethernet cable is disconnected



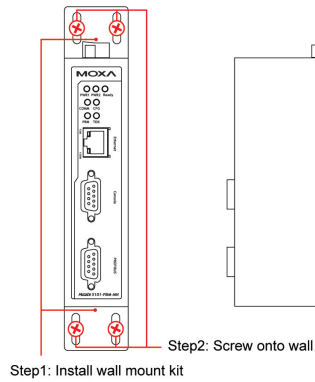
Reset Button

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.

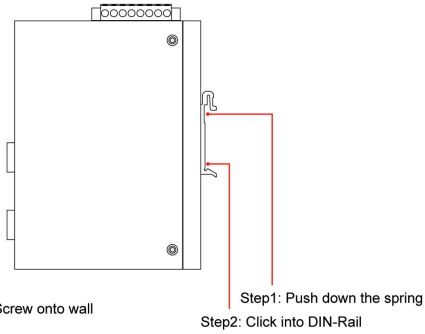
Hardware Installation Procedure

- STEP 1:** Connect the power adaptor. Connect the 12-48 VDC power line or DIN-rail power supply with the MGate 5101-PBM-MN device's terminal block.
- STEP 2:** Use a PROFIBUS cable to connect the unit to PROFIBUS slave device.
- STEP 3:** Connect the unit to the Modbus TCP device.
- STEP 4:** The MGate 5101-PBM-MN series is designed to be attached to a DIN-rail or mounted on a wall. For DIN-rail mounting, push down the spring and properly attach it to the DIN-rail until it "snaps" into place. For wall mounting, install the wall mount kit (optional) first, and then screw the device onto the wall. The following figure illustrates the two mounting options:

Wall Mount Installation



DIN-Rail Installation

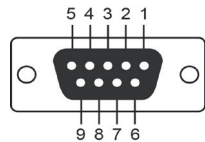


Software Installation Information

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 5101-PBM-MN User's Manual.

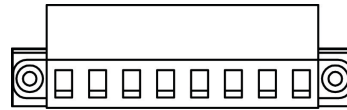
Pin Assignments

PROFIBUS Serial Port (Female DB9)



PIN	Signal Name
1	N.C.
2	N.C.
3	PROFIBUS D+
4	RTS
5	Signal common
6	5V
7	N.C.
8	PROFIBUS D-
9	N.C.

Power Input and Relay Output Pinouts



	V2+	V2-				V1+	V1-
Shielded Ground	DC Power Input 2	DC Power Input 2	N.O.	Common	N.C.	DC Power Input 1	DC Power Input 1

Specifications

Power Requirements

Power Input	12 to 48 VDC
Power Consumption	MGate 5101-PBM-MN: 365 mA @ 12 VDC, 100 mA @ 48 VDC
Operating Temperature	0 to 60°C (32 to 140°F) -40 to 75°C (-40 to 167°F) for -T model
Operating Humidity	5 to 95% RH
Dimensions	36 x 105 x 140 mm (1.42 x 4.13 x 5.51 in)

Reliability

Alert Tools	Built-in buzzer and RTC
MTBF	540,026 hrs

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