MGate 5134 Series Quick Installation Guide

Version 1.0, September 2022

Technical Support Contact Information www.moxa.com/support



P/N: 1802051340010

Overview

The MGate 5134 is an industrial Ethernet gateway for Modbus RTU/ASCII/TCP and PROFINET network communications.

Package Checklist

Before installing the MGate 5134, verify that the package contains the following items:

- 1 MGate 5134 gateway
- Quick installation guide (printed)
- Warranty card

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

Optional Accessories (can be purchased separately)

Color Description

- Mini DB9F-to-TB: DB9 female to terminal block connector
- WK-25: Wall-mounting kit, 2 plates, 4 screws, 25 x 43 x 2 mm

Hardware Introduction

LED Indicators

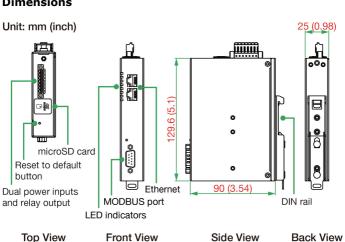
LED

LED	Color	Description		
PWR 1, PWR 2	Green	Power is on.		
	Off	Power is off.		
	Off	Power is off.		
	Green	Steady: Power is on, and the MGate is		
		functioning normally.		
		Blinking (1 sec.): The MGate has been		
		located by the Moxa utility DSU Location		
		function.		
Ready	Red	Steady: Power is on, and the MGate is		
		booting up.		
		Blinking slowly (0.5 sec.): Indicates an IP		
		conflict, or the DHCP server is not		
		responding properly.		
		Flashing quickly Blinking (0.1 sec.): the		
		microSD card failed.		
	Off	No connection with PROFINET I/O controller		
	Green	Steady: PROFINET I/O is exchanging data,		
PROFINET I/O		and Controller is in RUN mode.		
Device		Blinking (1 sec.): PROFINET DCP flash LED.		
Device	Red	Steady: Incorrect slot configuration.		
		Blinking (1sec.): One or more connections		
		timed out or in STOP mode.		
	Off	No communication with the Modbus device.		
Modbus RTU/ASCII/TCP Client	Green	Steady: Normal communication in progress.		
		Blinking (1 sec.): Communication error.		
	Red	The Modbus slave device returned an		
		error (exception).		
		2. Received a frame error (parity error,		
1		ala a al a a constant		

checksum error).

LED	Color	Description		
		 3. Timeout (the slave device does not respond). 4. TCP connection failed (only for Modbus TCP). 		
ETH 1, ETH 2	Green	Steady ON: Ethernet link on at 100Mbps.		
		Blinking: Data transmitting at 100Mbps.		
	Amber	Steady ON: Ethernet link on at 10Mbps.		
		Blinking: Data transmitting at 10Mbps.		
	Off	Link is down or not connected.		

Dimensions



Reset Button

Restore the MGate to factory default settings by using a pointed object (such as a straightened paper clip) to hold the reset button down until the Ready LED stops blinking (approximately five seconds).

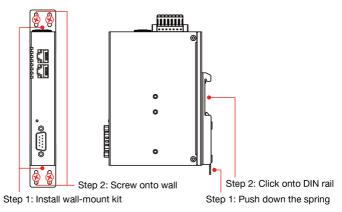
Hardware Installation Procedure

- Connect the power adapter. Connect the 12-48 VDC power line or DIN-rail power supply to the MGate 5134's terminal block.
- 2. Use a serial cable to connect the MGate to the Modbus device.
- 3. Use an Ethernet cable to connect the MGate to the PROFINET I/O controller.
- 4. The MGate 5134 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-mounting kit (optional) first and then screw the device onto the wall.

The following figure illustrates the two mounting options:

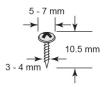
Wall-Mount Installation

DIN-Rail Installation



Wall- or Cabinet-mounting

We provide two metal plates to mount the unit on a wall or inside a cabinet. Attach the plates to the unit's rear panel with screws. With the plates attached, use screws to mount the unit on the wall. The heads of the screws should be 5 to 7 mm in diameter, the shafts should be 3 to 4 mm in diameter, and the length of the screws should be over 10.5 mm.



Software Installation Information

Please download the User Manual and Device Search Utility (DSU) from Moxa's website: www.moxa.com

For using the DSU, refer to the User's Manual. The MGate 5134 also supports login via a web browser.

Default IP address: 192.168.127.254

Create your administration account and password when you log in the first time.

Pin Assignments

Modbus Serial Port (Male DB9)

Pin	RS-232	RS-422/ RS-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	1	-	
8	CTS	ı	-	
9	_	-	-	



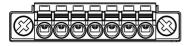
^{*}Signal ground

Ethernet Port (RJ45)

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



Power Input and Relay Output Pinouts



V2+	V2-	Г	- p		V1+	V1-
DC	DC				DC	DC
Power	Power	N.O.	Common	N.C.	Power	Power
Input 2	Input 2				Input 1	Input 1

Specifications

Power Parameters		
Power Input	12 to 48 VDC	
Power Consumption	455 mA max.	
Relays		
Contact Current Rating	Resistive load: 2 A @ 30 VDC	
Environmental Limits		
Operating Temperature	Standard models: -10 to 60°C (14 to 140°F)	
	Wide temp. models: -40 to 75°C (-40 to 167°F)	
Storage Temperature (package included)	-40 to 85°C (-40 to 185°F)	
Ambient Relative Humidity	5 to 95% RH	
Physical Characteristics		
Dimensions	25 x 90 x 129.6 mm (0.98 x 3.54 x 5.1 in)	
Weight	294 g (0.65 lb)	
Reliability		
Alert Tools	Built-in buzzer and RTC	
MTBF	1,240,821 hrs.	



ATTENTION

Power terminal plug wiring size is 28-14 AWG, tighten to 1.7 in-lbs, wire min. 80°C. Use copper conductors only.



Hot surface label.



Functional earth terminal.



ATTENTION

- This device is an open-type equipment and intended to be installed in a suitable enclosure.
- If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.
- When installing the device, the assembler is responsible for the securing the safety of the system in which the equipment is incorporated.

NOTE •

- This device is intended for use indoors and at altitudes up to 2,000 meters.
- Pollution degree 2.

NOTE Clean the device with a soft cloth, dry or with water.

NOTE The power input specification complies with the requirements of SELV (Safety Extra Low Voltage), and the power supply should comply with UL 61010-1 and UL 61010-2-201.

For any repair or maintenance needs, please contact us. Moxa Inc.

No. 1111, Heping Rd., Bade Dist., Taoyuan City 334004, Taiwan +886-03-2737575