

MGate 5134 Series Quick Installation Guide

Version 1.1, June 2024

Technical Support Contact Information
www.moxa.com/support

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P/N: 1802051340011



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 with a DIN-rail kit pre-installed
- Quick installation guide (printed)
- Warranty card

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

Optional Accessories (can be purchased separately)

- **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

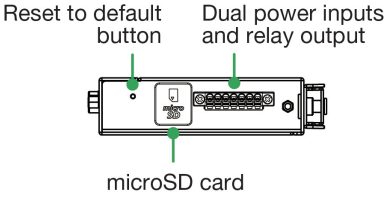
LED Indicators

LED	Color	Description
PWR 1, PWR 2	Green	Power is on.
	Off	Power is off.
Ready	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.
	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.
		Blinking quickly (0.1 sec.): the microSD card failed.
PROFINET I/O Device	Off	No connection with PROFINET I/O controller.
	Green	Steady: PROFINET I/O is exchanging data, and Controller is in RUN mode.
		Blinking (1 sec.): PROFINET DCP flash LED.
	Red	Steady: Incorrect slot configuration.
		Blinking (1sec.): One or more connections timed out or in STOP mode.
Modbus RTU/ASCII/ TCP Client	Off	No communication with the Modbus device.
	Green	Steady: Normal communication in progress.
	Red	Blinking (1 sec.): Communication error.
		1. The Modbus slave device returned an error (exception). 2. Received a frame error (parity error, checksum error). 3. Timeout (the slave device does not respond). 4. TCP connection failed (only for Modbus TCP).

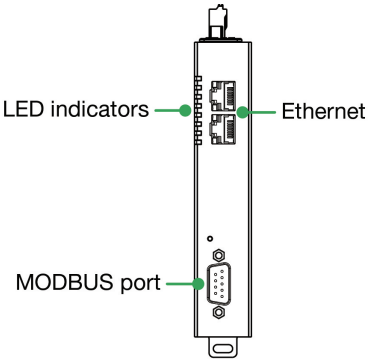
LED	Color	Description
ETH 1, ETH 2	Green	Steady ON: Ethernet link on at 100Mbps.
		Blinking: Data transmitting at 100Mbps.
	Amber	Steady ON: Ethernet link on at 10Mbps.
		Blinking: Data transmitting at 10Mbps.
Off	Link is down or not connected.	

Panel Layouts

Top View



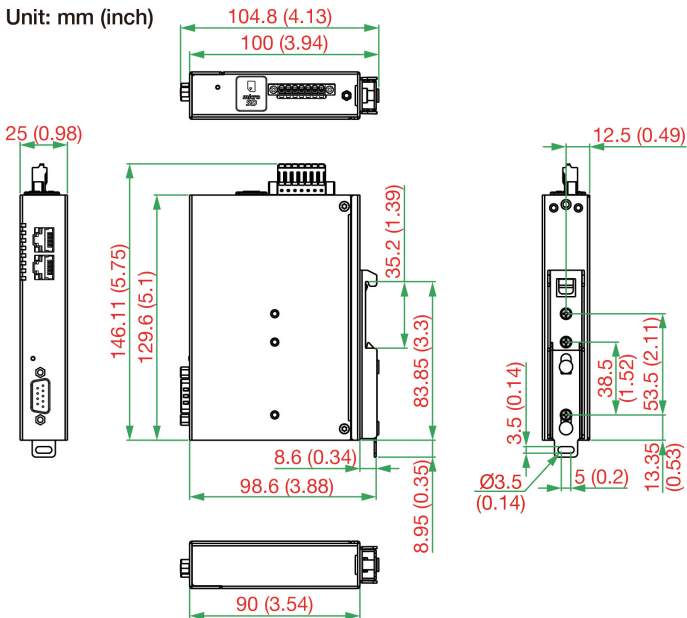
Front View



Dimensions

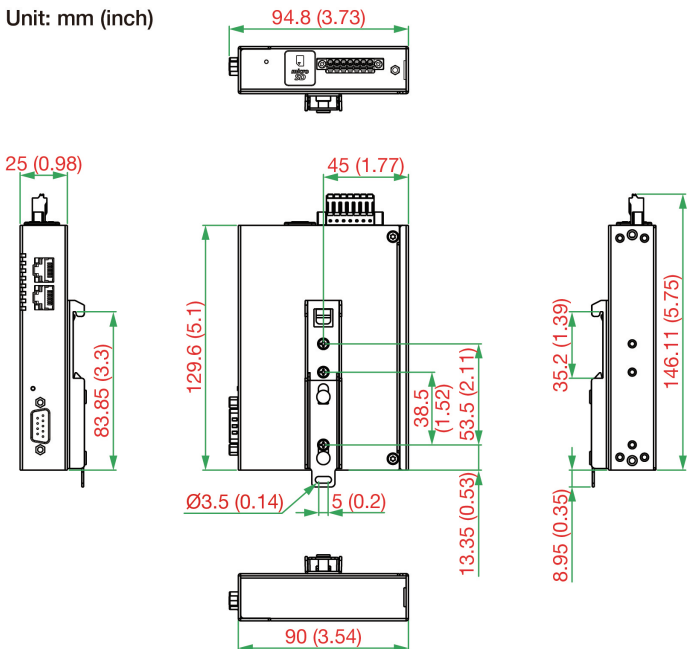
DIN Rail

Unit: mm (inch)



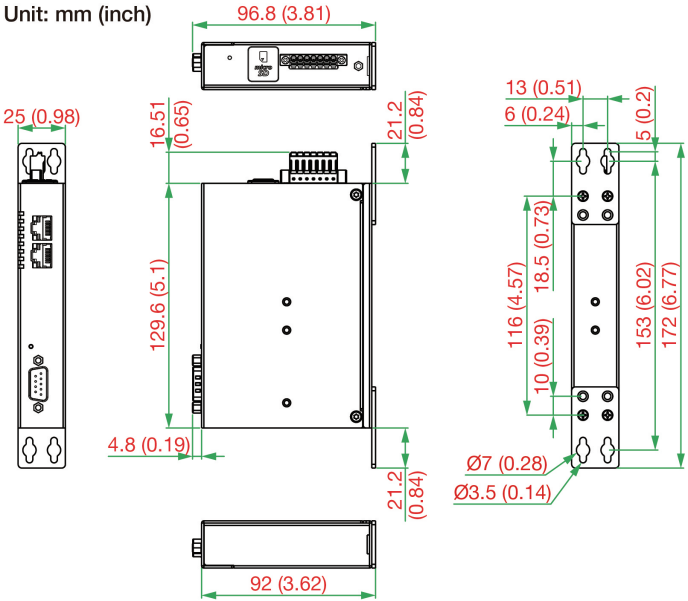
Side DIN Rail

Unit: mm (inch)



Wall Mount

Unit: mm (inch)



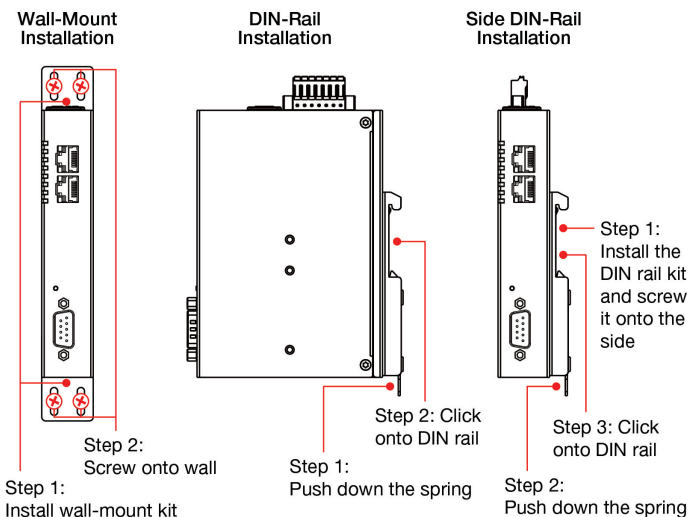
Reset Button

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

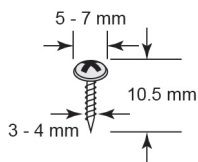
1. Connect the power adapter. Connect the 12-48 VDC power line or DIN-rail power supply to the MGate 5134's terminal block.
2. Use a serial cable to connect the MGate to the Modbus device.
3. Use an Ethernet cable to connect the MGate to the PROFINET I/O controller.
4. The MGate 5134 is designed to be 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 three mounting options:



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.

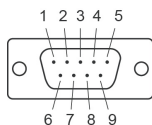
Default IP address: **192.168.127.254**

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

Pin Assignments

Modbus Serial Port (Male DB9)

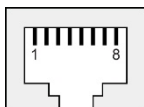
Pin	RS-232	RS-422/ RS-485 (4W)	RS-485 (2W)
1	DCD	TxD-(A)	-
2	RXD	TxD+(B)	-
3	TXD	RxD+(B)	Data+(B)
4	DTR	RxD-(A)	Data-(A)
5*	GND	GND	GND
6	DSR	-	-
7	RTS	-	-
8	CTS	-	-
9	-	-	-



*Signal ground

Ethernet Port (RJ45)

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



Power Input and Relay Output Pinouts



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



WARNING

사용자안내문 (User Guide)

이 기기는 업무용 환경에서 사용할 목적으로 적합성평가를 받은 기기로서가정용 환경에서 사용하는 경우 전파간섭의 우려가 있습니다.

This equipment has KC approval to be used for industrial environments and therefore it has the possibility of interferences with household equipment.

For any repair or maintenance needs, please contact us.

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