

MGate 5135/5435 系列

1 埠和 4 埠 Modbus RTU/ASCII/TCP 轉乙太網路/IP 閘道器



特色與優點

- Modbus 和 EtherNet/IP 之間的通訊協定轉換
- 支援 EtherNet/IP 接頭
- 支援 Modbus RTU/ASCII/TCP 用戶端
- 透過乙太網路串聯和雙子網路彈性部署
- 嵌入式流量監控/診斷資訊，便於故障排除
- 透過網頁式主控台進行輕鬆的裝置配置
- microSD 卡可用於配置備份/複製
- 支援雙備援 DC 電源輸入和 1 個繼電器輸出
- 提供 -40 至 75°C 寬溫度操作型號可供選用
- 串列內建埠 2kV 隔離保護
- 根據 IEC 62443-4-2 以安全啟動開發

認證



簡介

MGate 5135/5435 閘道器是 1 埠和 4 埠工業乙太網路閘道器，分別用於 Modbus RTU/ASCII/TCP 和 EtherNet/IP 網路通訊。若要將現有的 Modbus 裝置整合於 EtherNet/IP 網路，可使用 MGate 5135/5435 閘道器做為 Modbus 用戶端，藉以收集並交換 EtherNet/IP 主機的數據。所有型號均有強固而小巧的金屬外殼加以保護，可使用 DIN 軌道安裝，而且提供內建串列隔離。堅固設計適合工業應用，例如工廠自動化、電力、石油與天然氣、水資源與廢水，以及其他製程自動化工業。

輕鬆配置

MGate 5135/5435 閘道器配有 Web 主控台，不需要安裝額外的公用程式即可輕鬆進行配置。此外，通訊的 HTTPS 加密可確保更高的網路安全性。在大多數數據採集應用中，使用 Modbus 命令的裝置配置可能相當費時，而且會增加成本。MGate 5135/5435 閘道器透過 CSV 檔案提供離線配置，協助快速完成 Modbus 設定。MGate 閘道器也為 RS-485 2 線提供軟體可配置的上拉/下拉和終端電阻設定，因此減少工作量，而且完全不需要開啟機箱。

輕鬆的故障排除

MGate 5135/5435 閘道器提供多種維護功能，能夠減少故障排除時間和成本，包括 LED 指示燈、通訊協定診斷、流量監控和標籤檢視。這些工具可協助您擷取和檢查數據以輕鬆識別問題的根本原因，特別是在安裝階段。MGate 閘道器也提供狀態監控和失效防護功能。Modbus 設備中斷連線或無回應時，狀態監控功能會通知 PLC/DCS/SCADA 系統，程序 PLC/DCS 取得每台終端設備的狀態，並發出警報通知操作員。失效防護功能會在主機中斷連線時執行使用者預先定義的動作，藉以防止終端裝置長時間離線。

規格

Ethernet Interface

10/100BaseT(X) Ports (RJ45 connector)	2 Auto MDI/MDI-X connection
Magnetic Isolation Protection	1.5 kV (built-in)

Ethernet Software Features

Industrial Protocols	Modbus TCP Client, EtherNet/IP Adapter
Configuration Options	Web Console (HTTPS), Device Search Utility (DSU)

Management	ARP, DHCP Client, DNS, HTTP, HTTPS, SMTP, SNMP Trap, SNMPv1/v2c/v3, TCP/IP, UDP
MIB	RFC1213, RFC1317
Time Management	NTP Client

Security Functions

Authentication	Local database
Encryption	HTTPS, AES-128, AES-256, SHA-256
Security Protocols	SNMPv3 SNMPv2c Trap HTTPS (TLS 1.3)

Serial Interface

No. of Ports	MGate 5135/5135-T: 1 MGate 5435/5435-T: 4
Connector	DB9 male
Serial Standards	RS-232/422/485
Baudrate	300 bps to 921.6 kbps
Data Bits	7, 8
Parity	None, Even, Odd, Space, Mark
Stop Bits	1, 2
Flow Control	RTS Toggle (RS-232 only), RTS/CTS
RS-485 Data Direction Control	ADDC (automatic data direction control)
Pull High/Low Resistor for RS-485	1 kilo-ohm, 150 kilo-ohms software configurable
Terminator for RS-485	120 ohms software configurable
Isolation	2 kV (built-in)

Serial Signals

RS-232	TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND
RS-422	Tx+, Tx-, Rx+, Rx-, GND
RS-485-2w	Data+, Data-, GND
RS-485-4w	Tx+, Tx-, Rx+, Rx-, GND

Serial Software Features

Industrial Protocols	Modbus RTU/ASCII Client
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Modbus RTU/ASCII

Mode	Client
Functions Supported	1, 2, 3, 4, 5, 6, 15, 16, 23
Max. No. of Server Connections	31
Max. No. of Commands	128 per serial port

Modbus TCP

Mode	Client
Functions Supported	1, 2, 3, 4, 5, 6, 15, 16, 23
Max. No. of Server Connections	32
Max. No. of Commands	128
Total Output Data Size	MGate 5135: 2048 bytes MGate 5135-T: 2048 bytes MGate 5435: 4000 bytes MGate 5435-T: 4000 bytes
Total Input Data Size	MGate 5135: 2048 bytes MGate 5135-T: 2048 bytes MGate 5435: 4000 bytes MGate 5435-T: 4000 bytes

EtherNet/IP

Mode	Adapter
CIP Objects Supported	Identity, Message Router, Assembly, Connection Manager, TCP/IP interface, Ethernet link, Port
Max. No. of Scanner Connections	MGate 5135/5135-T: 4 (read/write) MGate 5435/5435-T: 8 (read/write)
Input Data Size	MGate 5135: 496 bytes/connection (total: 1984 bytes) bytes MGate 5135-T: 496 bytes/connection (total: 1984 bytes) bytes MGate 5435: 496 bytes/connection (total: 3968 bytes) bytes MGate 5435-T: 496 bytes/connection (total: 3968 bytes) bytes
Output Data Size	MGate 5135: 496 bytes/connection (total: 1984 bytes) bytes MGate 5135-T: 496 bytes/connection (total: 1984 bytes) bytes MGate 5435: 496 bytes/connection (total: 3968 bytes) bytes MGate 5435-T: 496 bytes/connection (total: 3968 bytes) bytes

Memory

microSD Slot	Up to 32 GB (SD 2.0 compatible)
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Power Parameters

Input Voltage	12 to 48 VDC
Input Current	455 mA (max)
Power Connector	Spring-type Euroblock terminal

Relays

Contact Current Rating	Resistive load: 2 A @ 30 VDC
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Physical Characteristics

Housing	Metal
IP Rating	IP30
Dimensions	MGate 5135/5135-T: 25 x 90 x 130 mm (0.98 x 3.54 x 5.1 in) MGate 5435/5435-T: 42 x 90 x 130 mm (1.65 x 3.54 x 5.1 in)
Weight	MGate 5135/5135-T: 294 g (0.65 lb) MGate 5435/5435-T: 403 g (0.89 lb)

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% (non-condensing)

Standards and Certifications

Safety	EN 61010-2-201, UL 61010-2-201
EMC	EN 61000-6-2/-6-4
EMI	FCC Part 15B Class A
EMS	IEC 61000-4-2 ESD: Contact: 8 kV; Air: 15 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 10 V/m IEC 61000-4-4 EFT: Power: 4 kV; Signal: 2 kV IEC 61000-4-5 Surge: Power: 2 kV; Signal: 2 kV IEC 61000-4-6 CS: 150 kHz to 80 MHz: 10 V/m; Signal: 10 V/m IEC 61000-4-8 PFMF
Freefall	IEC 60068-2-31
Shock	IEC 60068-2-27
Vibration	IEC 60068-2-6, IEC 60068-2-64

MTBF

Time	MGate 5135/5135-T: 1,240,821 hrs MGate 5435/5435-T: 689,989 hrs hrs
Standards	Telcordia SR332

Warranty

Warranty Period	5 years
Details	See www.moxa.com/tw/warranty

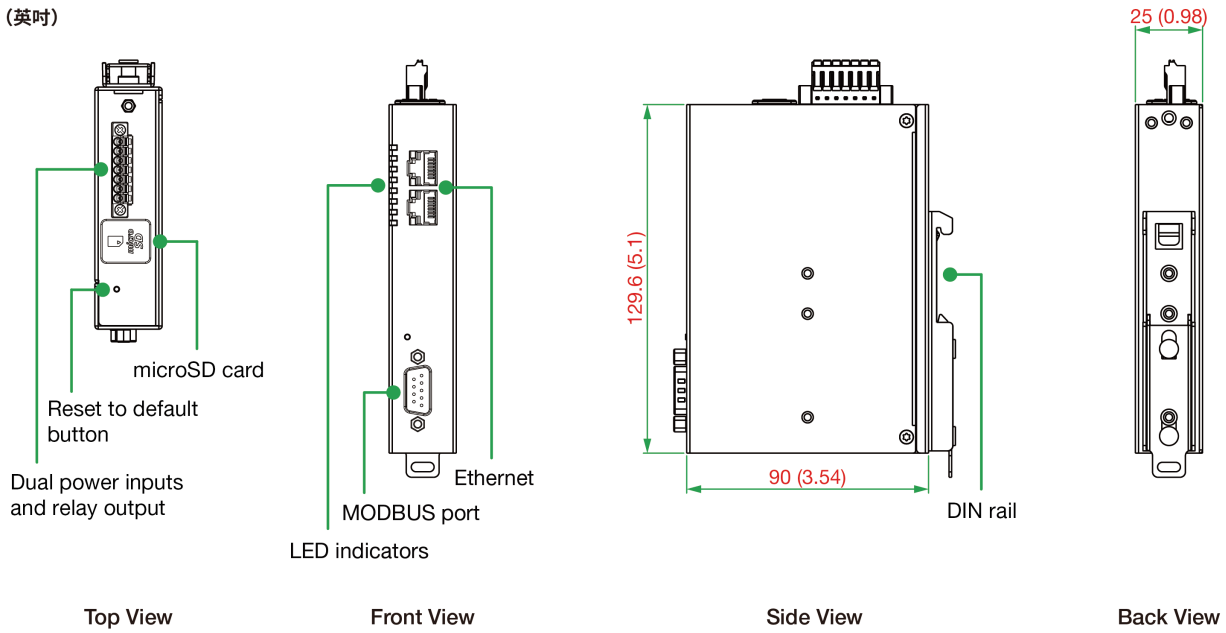
Package Contents

Device	1 x MGate 5135 or MGate 5435 gateway
Documentation	1 x quick installation guide 1 x warranty card

尺寸

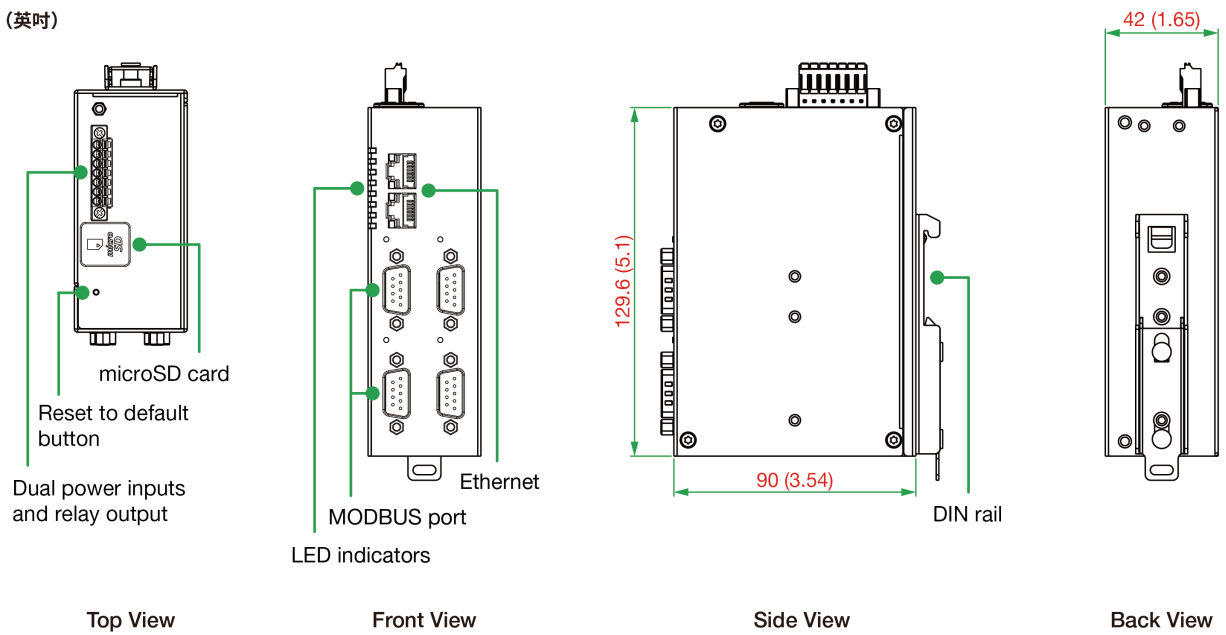
MGate 5135

單位：公釐 (英吋)



MGate 5435

單位：公釐 (英吋)



訂購資訊

Model Name	No. of Serial Ports	Operating Temperature
MGate 5135	1	-10 to 60°C
MGate 5135-T	1	-40 to 75°C
MGate 5435	4	-10 to 60°C
MGate 5435-T	4	-40 to 75°C

配件 (選購)

Connectors

Mini DB9F-to-TB

DB9 female to terminal block connector

Wall-Mounting Kits

WK-25

Wall-mounting kit, 2 plates, 4 screws, 25 x 43 x 2 mm

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