

MGate 5135/5435 系列

1 與 4 埠 Modbus RTU/ASCII/TCP 轉 EtherNet/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 (主控裝置)
- 透過乙太網路串聯與雙子網路彈性部署
- 嵌入式流量監控/診斷資訊，便於故障排除
- 透過網頁式主控台輕鬆配置裝置
- microSD 卡可用於備份/複製配置
- 支援雙備援 DC 電源輸入與 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

認證



簡介

MGate 5135/5435 閘道器是 1 與 4 埠工業乙太網路閘道器，專為 Modbus RTU/ASCII/TCP 與 EtherNet/IP 網路通訊設計。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，藉以收集數據並與 EtherNet/IP 主機交換數據。所有型號均有強固緊湊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

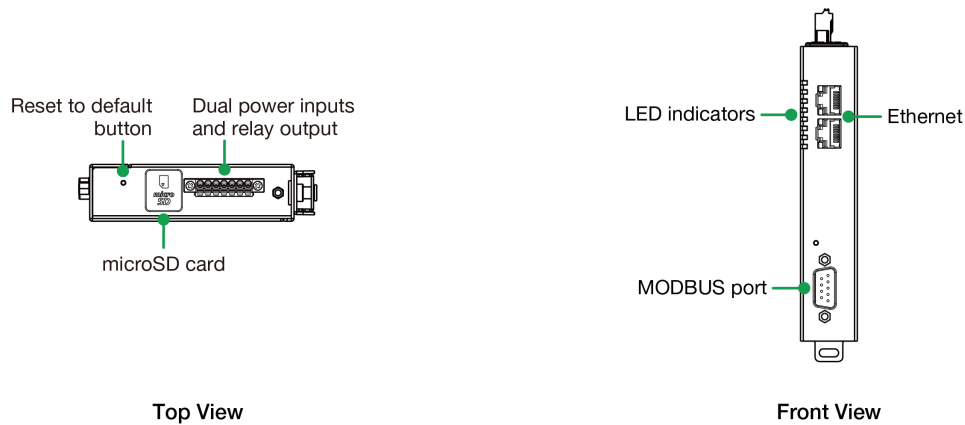
MGate 5135/5435 閘道器提供 Web 主控台，無需安裝額外的公用程式即可輕鬆配置。此外，HTTPS 通訊加密還可確保更高的網路安全性。在大多數資料擷取應用中，使用 Modbus 命令設定裝置的過程可能既耗時又會增加成本。MGate 5135/5435 閘道器提供透過 CSV 檔案離線設定的功能，可協助快速完成 Modbus 設定。MGate 閘道器提供可透過軟體設定的 RS-485 兩線式上拉/下拉與終端電阻功能，無需開啟機箱即可完成設定，大幅減少操作負擔。

輕鬆排除故障

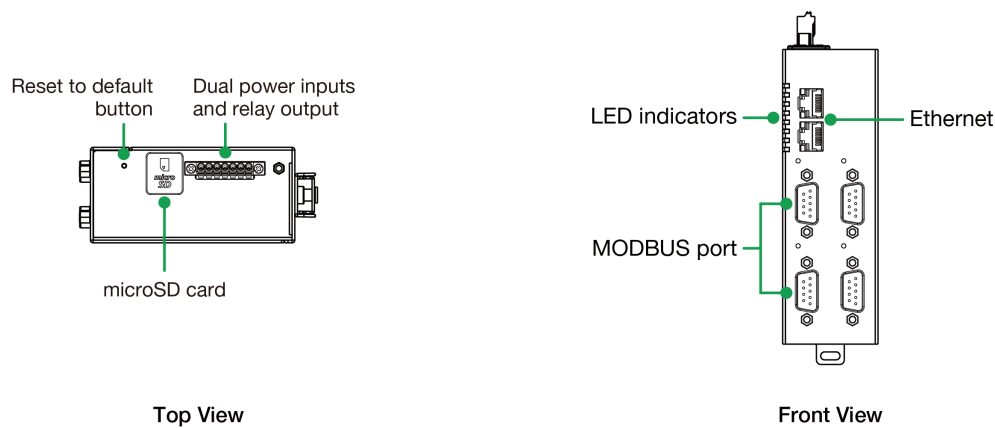
MGate 5135/5435 閘道器提供多種維護功能，包括 LED 狀態指示燈、通訊協定診斷、流量監控及標籤檢視等，可縮短故障排除時間並降低維護成本。這些工具可協助您擷取與檢查資料，輕鬆找出問題的根本原因，尤其在安裝階段特別實用。MGate 閘道器也提供狀態監控和失效防護功能。Modbus 設備中斷連線或無回應時，狀態監控功能會通知 PLC/DCS/SCADA 系統，程序 PLC/DCS 取得每台終端設備的狀態，並發出警報通知操作員。當主機中斷連線時，失效防護功能會執行使用者預先定義的動作，以防止終端裝置長時間離線。

外觀

MGate 5135



MGate 5435



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	Automatic Data Direction Control (ADDC)
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
Standards	Telcordia SR332

Warranty

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

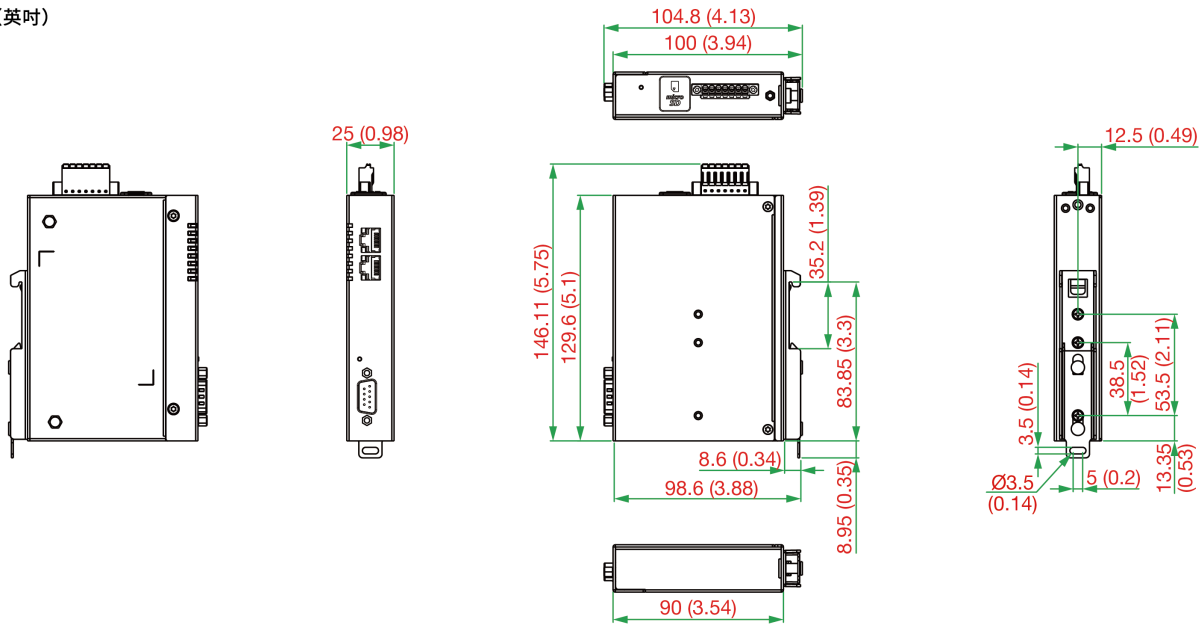
Package Contents

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

尺寸

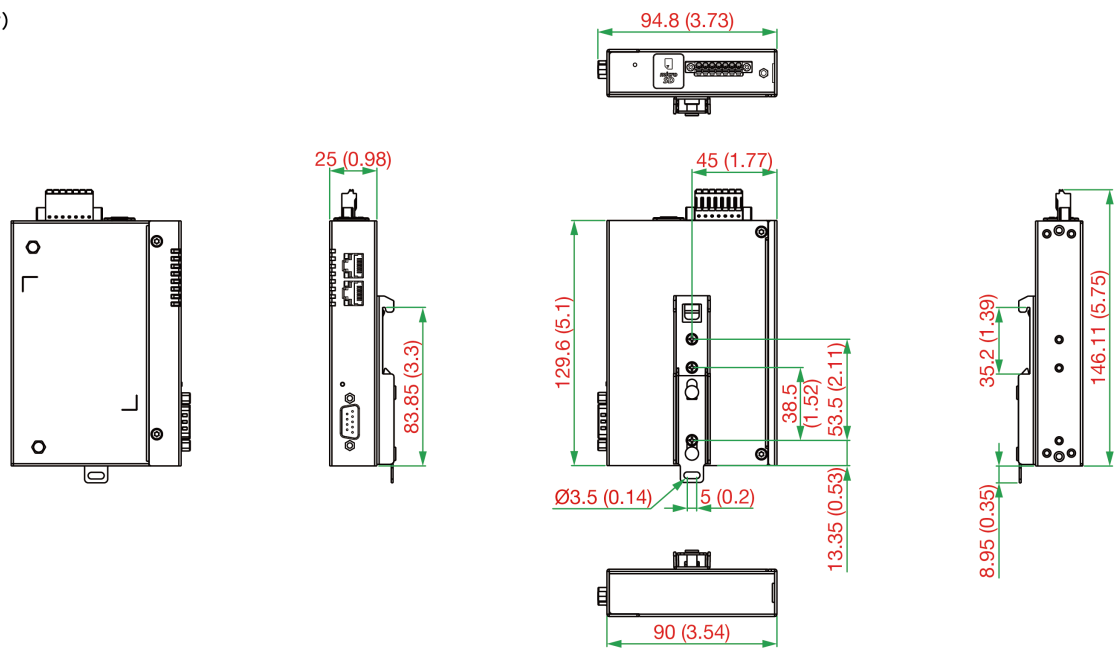
MGate 5135 DIN 軌道安裝

單位：公釐（英吋）



MGate 5135 側 DIN 軌道安裝

單位：公釐（英吋）

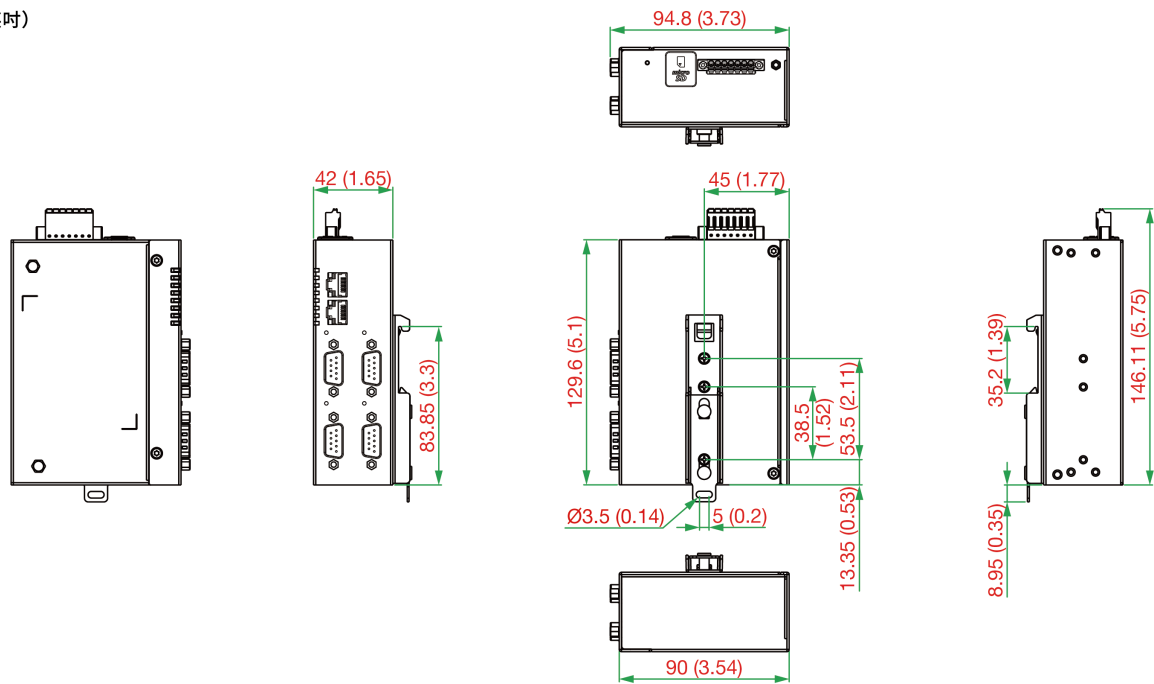


單位：公釐（英吋）



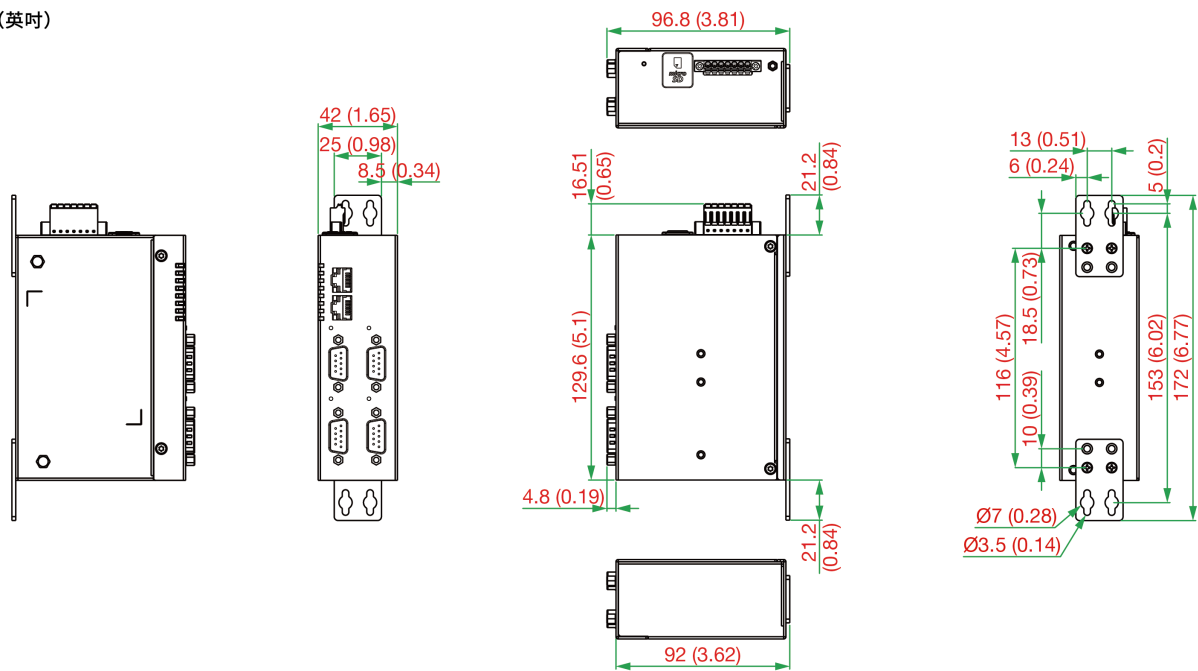
MGate 5435 側 DIN 軌道安裝

單位：公釐（英吋）



MGate 5435 壁掛安裝

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
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Wall-Mounting Kits

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