

MGate 5192 系列

1 埠 IEC 61850 轉 DNP3/IEC 101/IEC 104/Modbus 閘道器



特色與優點

- 支援 IEC 61850 MMS Client (用戶端)
- 支援 DNP3 串列/TCP/UDP Outstation (外站)
- 支援 IEC 60870-5-101 Server (伺服器)
- 支援 IEC 60870-5-104 Client (用戶端)
- 支援 Modbus RTU/ASCII/TCP Server (Slave)
- 透過乙太網路串接與雙子網路，實現彈性佈署
- 嵌入式流量監控/診斷資訊，便於故障排除
- 透過網頁型主控台輕鬆進行裝置配置
- 用於配置備份/複製的 microSD 卡
- 支援雙備援 DC 電源輸入與 1 個繼電器輸出
- 串列內建埠 2kV 隔離保護
- 符合 IEC 62443-4-2 安全等級 2 的要求
- 提供 -40 至 75°C 寬溫度操作型號可供選用

認證



簡介

MGate 5192 是一款工業通訊協定閘道器，用於將 IEC 61850 MMS 轉換為 Modbus RTU/ASCII/TCP、DNP3 串列/TCP/UDP、IEC 60870-5-101 或 IEC 60870-5-104 通訊。若要將現有的 IEC 61850 裝置（例如 IED 或繼電器）整合至 Modbus、DNP3、IEC 101 或 IEC 104 網路，可將 MGate 5192 作為 IEC 61850 MMS 用戶端，與 Modbus RTU/ASCII/TCP、DNP3 串列/TCP/UDP、IEC 60870-5-101 或 IEC 60870-5-104 的 SCADA/裝置進行資料收集與交換。所有型號均有強固而輕巧的金屬外殼加以保護，可使用 DIN 導軌安裝，而且提供內建串列隔離。堅固的設計適用於變電站與再生能源相關應用等工業領域。

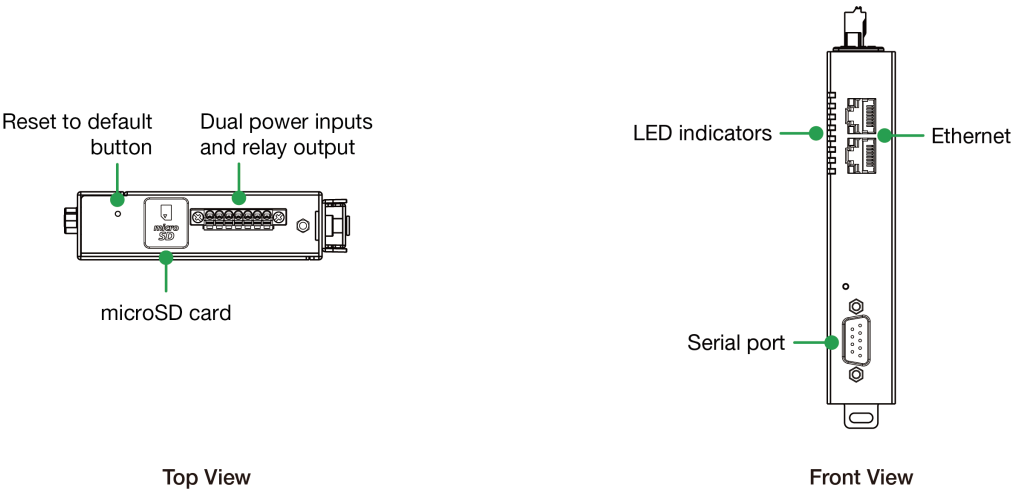
輕鬆配置

MGate 5192 閘道器提供網頁主控台，無需安裝工具即可輕鬆配置。此外，HTTPS 通訊加密可確保更高的網路安全性。在多數資料擷取應用中，使用 Modbus 指令配置裝置既耗時又會增加成本。MGate 5192 閘道器提供透過 CSV 檔案進行離線配置的功能，有助於快速完成 Modbus 設定。MGate 閘道器針對 RS-485 2 線式通訊提供可透過軟體配置的拉高/拉低電阻與終端電阻設定，無需拆開機殼即可調整，進而減少工作量。

輕鬆排除故障

MGate 5192 閘道器提供多種維護功能以減少故障排除的時間與成本，包括 LED 指示燈、通訊協定診斷、流量監控以及標籤檢視。這些工具有助於擷取並檢查資料，以便輕鬆識別問題的根本原因，尤其是在安裝階段。MGate 閘道器也提供狀態監控和失效防護功能。IEC 61850 裝置中斷連線或無回應時，狀態監控功能會通知 SCADA 系統，程序 PSCADA 取得每台終端裝置的狀態，並發出警報通知操作員。故障保護功能可保留最新資料，並停止向 IEC 61850 設備輸出資料。當 SCADA 中斷連線時，終端設備將維持最後操作狀態，不會進入離線狀態。

外觀



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	IEC 61850 MMS Client Modbus TCP Server IEC 60870-5-104 Server DNP3 TCP/UDP Outstation
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	1
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 Server IEC 60870-5-101 Server DNP3 Serial Outstation
----------------------	---

IEC 61850

Mode	MMS Client
Max. No. of Server Connections	32
Max. No. of Data Objects	5000 points

Modbus TCP

Mode	Server
Functions Supported	1, 2, 3, 4, 5, 6, 15, 16, 23
Max. No. of Client Connections	16
Max. No. of Data Tags	5000 tags

Modbus RTU/ASCII

Mode	Server
Functions Supported	1, 2, 3, 4, 5, 6, 15, 16, 23
Max. No. of Client Connections	1
Max. No. of Data Tags	5000 tags

DNP3 TCP/UDP

Mode	Outstation
Objects Supported	Binary inputs Analog inputs Counters Frozen counters Binary outputs Analog outputs
Max. No. of Client Connections	1
Protocol Security	Secure Authentication v5
Max. No. of Objects	5000 points

DNP3 Serial

Mode	Outstation
Objects Supported	Binary inputs Analog inputs Counters Frozen counters Binary outputs Analog outputs
Max. No. of Client Connections	1
Max. No. of Objects	5000 points

IEC 60870-5-101

Mode	Server (balanced/unbalanced)
Objects Supported	Single point Double point Step position Bit string of 32 bit Measured value (normalized) Measured value (scaled) Measured value (floating) Integrated totals
Max. No. of Client Connections	1
Max. No. of Information Objects	5000 points

IEC 60870-5-104

Mode	Server
Objects Supported	Single point Double point Step position Bit string of 32 bit Measured value (normalized) Measured value (scaled) Measured value (floating) Integrated totals

Max. No. of Client Connections	32
Max. No. of Information Objects	5000 points
Memory	
microSD Slot	Up to 32 GB (SD 2.0 compatible)
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
Physical Characteristics	
Housing	Metal
IP Rating	IP30
Dimensions	25 x 90 x 129.6 mm (0.98 x 3.54 x 5.1 in)
Weight	294 g (0.65 lb)
Environmental Limits	
Operating Temperature	-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: 20 V/m IEC 61000-4-4 EFT: Power: 4 kV; Signal: 4 kV IEC 61000-4-5 Surge: Power: 2 kV; Signal: 4 kV IEC 61000-4-6 CS: 10 V/m IEC 61000-4-8 PFMF: 100 A/m
Shock	IEC 60068-2-27
Vibration	IEC 60068-2-6 IEC 60068-2-64
Power Substation	IEEE 1613 IEC 61850-3
International Approval	UKCA KC
MTBF	
Time	1,240,821 hrs
Standards	Telcordia SR332

Warranty

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

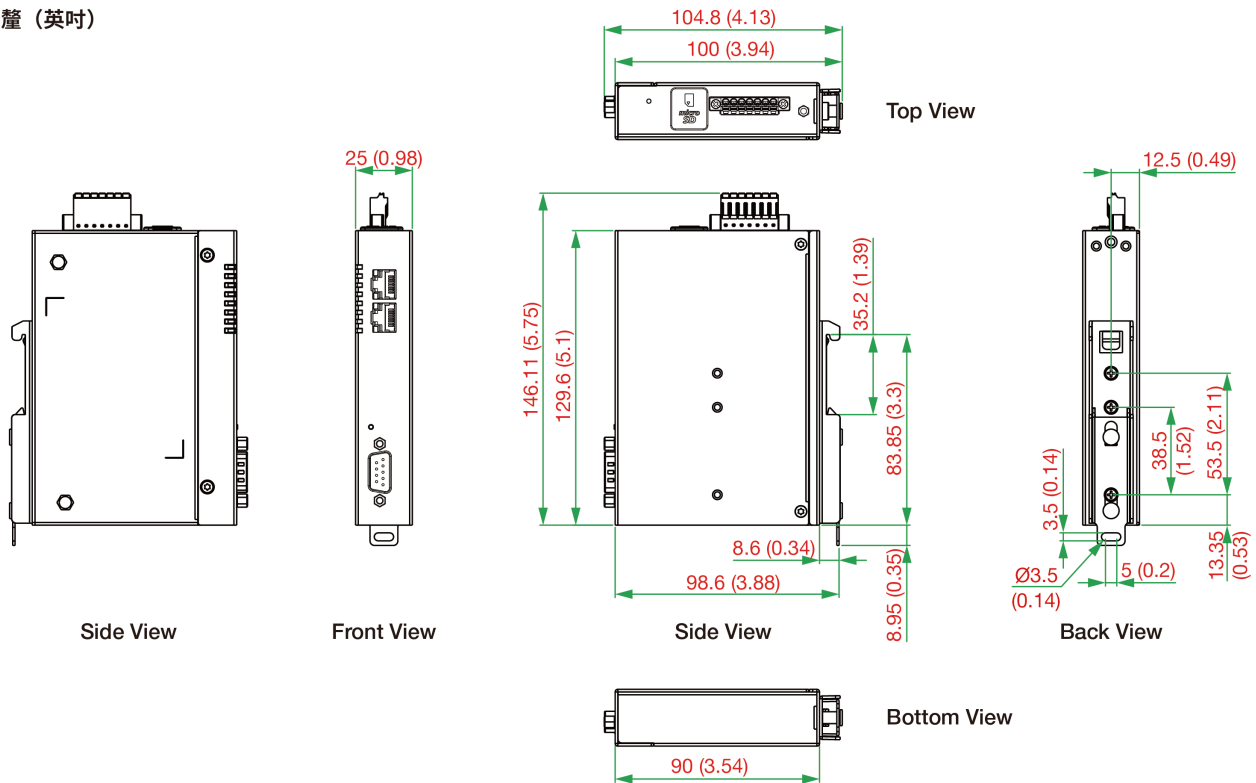
Package Contents

Device	1 x MGate 5192 Series gateway
Documentation	1 x quick installation guide 1 x warranty card

尺寸

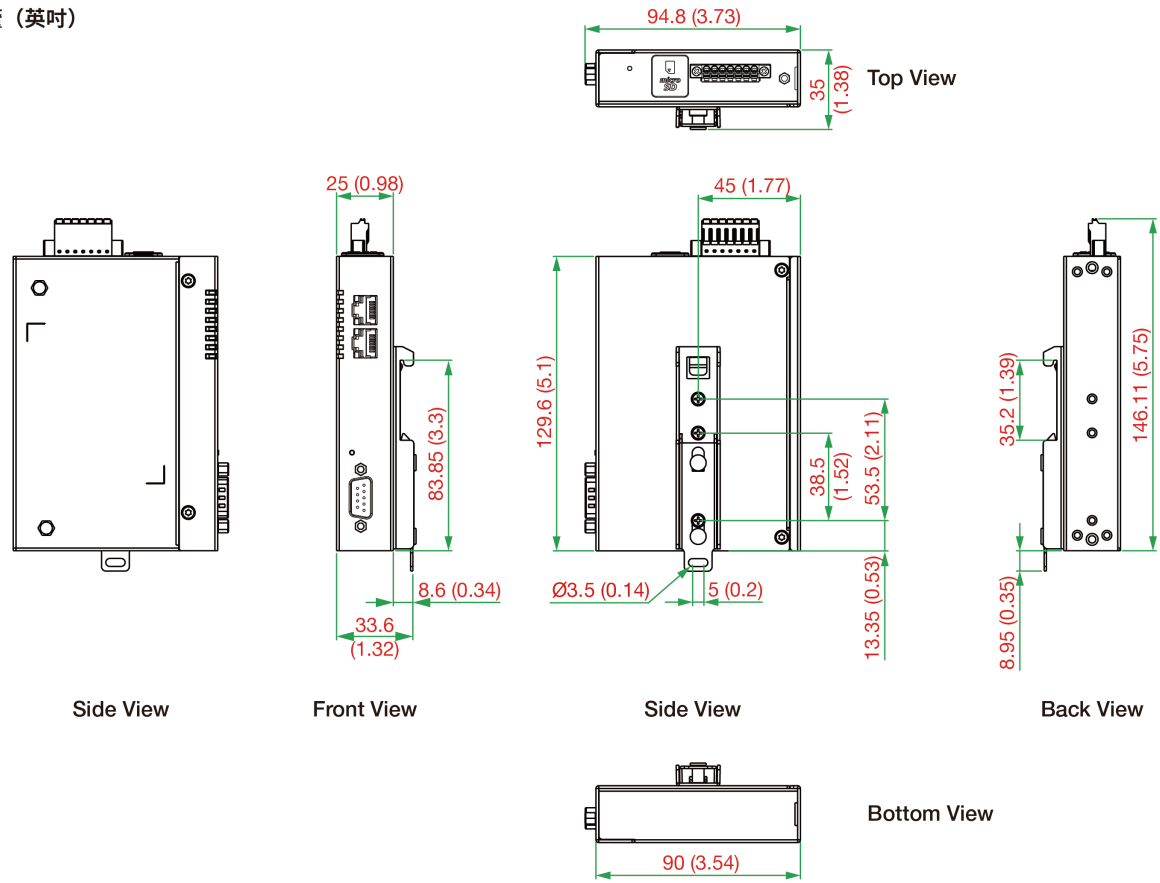
DIN 導軌安裝

單位：公釐（英吋）



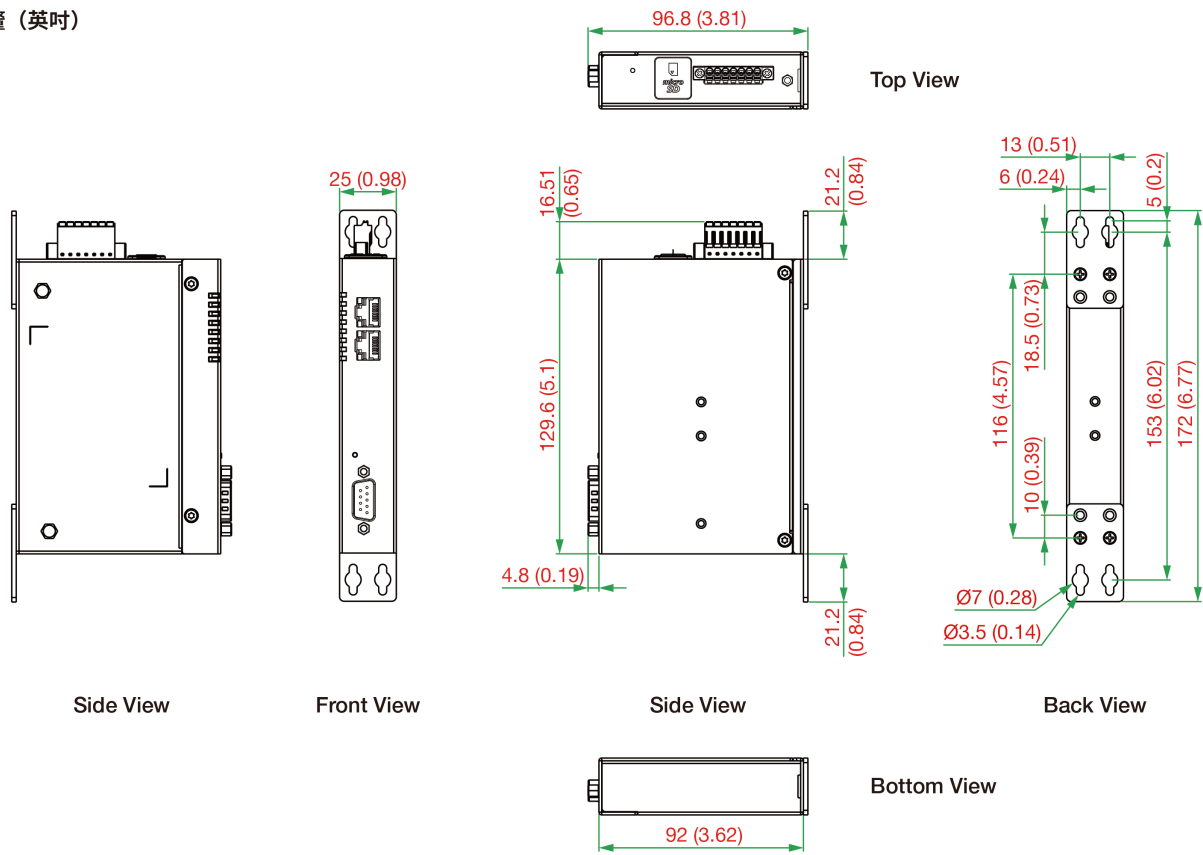
DIN 導軌安裝 (側視圖)

單位：公釐 (英吋)



壁掛安裝

單位：公釐 (英吋)



訂購資訊

Model Name	No. of Serial Ports	Operating Temperature
MGate 5192-T	1	-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
-------	---

© Moxa Inc. 版權所有。2025 年 12 月 03 日更新。

未經 Moxa Inc. 明確書面許可，不得以任何方式複製或使用本文件及其任何部分。產品規格如有變更，恕不另行通知。請至本公司官網了解最新的產品資訊。