

MGate MB3180/MB3280/MB3480 系列

1、2 與 4 埠標準串列轉 Ethernet Modbus 閘道器



特色與優點

- 支援自動裝置路由功能，可輕鬆配置
- 支援按 TCP 埠或 IP 位址路由以進行彈性部署
- 在 Modbus TCP 與 Modbus RTU/ASCII 通訊協定之間轉換
- 1 個乙太網路連接埠與 1、2 或 4 個 RS-232/422/485 連接埠
- 16 個同時 TCP 主控裝置，每個主控裝置可處底最多 32 個同時要求
- 輕鬆設定及配置硬體

認證



簡介

MB3180、MB3280 與 MB3480 是標準 Modbus 閘道器，可在 Modbus TCP 與 Modbus RTU/ASCII 通訊協定之間轉換。支援最多 16 個同時 Modbus TCP 主控裝置，每個串列埠可以有最多 31 個 RTU/ASCII 從屬裝置。針對 RTU/ASCII 主控裝置，可支援最多 32 個 TCP 從屬裝置。透過串列埠路由可由 IP 位址、TCP 埠號或 ID 對應控制。按 TCP 埠與 IP 位址進行串列埠路由可允許存取最多 4 個 TCP 用戶端/主控裝置（MB3280/MB3480 型號），而按 ID 對應進行路由則允許存取最多 16 個 TCP 用戶端/主控裝置（MB3180/MB3280/MB3480）。

標準 Modbus 網路整合

三個標準 MGate™ 型號（MB3180、MB3280 與 MB3480）專為輕鬆整合 Modbus TCP 與 RTU/ASCII 網路所設計。對於這些型號，Modbus 串列從屬裝置可以無縫整合到現有 Modbus TCP 網路，而串列主控裝置則可存取 Modbus TCP 從屬裝置。MB3180、MB3280 與 MB3480 提供易於整合網路、可自訂，且幾乎能與任何 Modbus 網路相容的功能。

高密度、符合成本效益的閘道器

MGate™ MB3000 閘道器可將高密度的 Modbus 節點有效連接至同一個網路。MB3280 可以管理最多 62 個串列從屬節點，而 MB3480 可以管理最多 124 個串列從屬節點。每一個 RS-232/422/485 串列埠都可以針對 Modbus RTU 或 Modbus ASCII 操作，以及針對不同的傳輸率分別配置，允許兩種類型的網路透過一個 Modbus 閘道器與 Modbus TCP 整合。

輕鬆配置自動裝置路由功能

對於需要配置大量 Modbus 裝置的工程師而言，Moxa 的自動裝置路由功能可協助消除他們遇到的許多問題與不便。只需要按一下滑鼠鍵，即可設定從屬 ID 路由表並配置使 Modbus 閘道自動偵測來自監督控制與資料擷取 (SCADA) 系統的 Modbus 要求。自動裝置路由功能消除了手動建立從屬 ID 路由表的需要，為工程師節省了大量的時間與成本。

規格

Ethernet Interface

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

Ethernet Software Features

Industrial Protocols	Modbus TCP Client (Master) Modbus TCP Server (Slave)
Configuration Options	All models: Web Console (HTTP), Device Search Utility (DSU), MGate Manager, MCC Tool, Telnet Console MGate MB3280/MB3480: Web Console (HTTPS)

Management	All models: ARP, DHCP Client, DNS, HTTP, SNMPv1/v2c/v3, TCP/IP, Telnet, UDP MGate MB3280/MB3240: HTTPS, SMTP, SNMP Trap, NTP Client
MIB	RFC1213, RFC1317
Time Management	NTP Client (MGate MB3180 Excluded)

Security Functions

Authentication	Local database
Encryption	HTTPS AES-128 AES-256 SHA-256
Security Protocols	SNMPv3 HTTPS (TLS 1.2) (except MGate MB3180)

Serial Interface

No. of Ports	MGate MB3180: 1 MGate MB3280: 2 MGate MB3480: 4
Connector	DB9 male
Serial Standards	RS-232/422/485 (software-selectable)
Baudrate	50 bps to 921.6 kbps
Data Bits	7, 8
Parity	None Even Odd Space Mark
Stop Bits	1, 2
Flow Control	DTR/DSR 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
Terminator for RS-485	MGate MB3180: None MGate MB3280/MB3480: 120 ohms

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 Master Modbus RTU/ASCII Slave
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Modbus (Transparent)

Max. No. of Client Connections	16
Max. No. of Server Connections	32

Power Parameters

Input Voltage	12 to 48 VDC
Input Current	MGate MB3180: 200 mA @ 12 VDC MGate MB3280: 250 mA @ 12 VDC MGate MB3480: 365 mA @ 12 VDC
Power Connector	MGate MB3180: Power jack MGate MB3280/MB3480: Power jack and terminal block

Physical Characteristics

Housing	Metal
IP Rating	IP30 ¹
Dimensions (with ears)	MGate MB3180: 22 x 75 x 80 mm (0.87 x 2.95 x 3.15 in) MGate MB3280: 22 x 100 x 111 mm (0.87 x 3.94 x 4.37 in) MGate MB3480: 35.5 x 102.7 x 181.3 mm (1.40 x 4.04 x 7.14 in)
Dimensions (without ears)	MGate MB3180: 22 x 52 x 80 mm (0.87 x 2.05 x 3.15 in) MGate MB3280: 22 x 77 x 111 mm (0.87 x 3.03 x 4.37 in) MGate MB3480: 35.5 x 102.7 x 157.2 mm (1.40 x 4.04 x 6.19 in)
Weight	MGate MB3180: 340 g (0.75 lb) MGate MB3280: 360 g (0.79 lb) MGate MB3480: 740 g (1.63 lb)

Environmental Limits

Operating Temperature	MGate MB3180: 0 to 55°C (32 to 131°F) MGate MB3280: 0 to 60°C (32 to 140°F) MGate MB3480: 0 to 55°C (32 to 131°F)
Storage Temperature (package included)	-40 to 85°C (-40 to 185°F)
Ambient Relative Humidity	5 to 95% (non-condensing)

Standards and Certifications

EMC	EN 55032/35
EMI	CISPR 32, FCC Part 15B Class A
EMS	IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m IEC 61000-4-4 EFT: Power: 1 kV; Signal: 0.5 kV IEC 61000-4-5 Surge: Power: 1 kV (MB3180/MB3280) IEC 61000-4-5 Surge: Power: 1 kV; Signal: 2 kV (MB3480) IEC 61000-4-6 CS: 3 V IEC 61000-4-8 PFMF IEC 61000-4-11
Safety	MGate MB3180: EN 62368-1, UL 60950-1 MGate MB3280: IEC/UL 62368-1, IEC/UL 60950-1 MGate MB3480: IEC/UL 62368-1, IEC 60950-1

1. 針對 MGate MB3480，必須使用壁掛安裝套件中隨附的兩顆螺絲將套件固定於 MGate 的底部，並且必須正確將 MGate 與電源輸入的端子模組連接。

MTBF

Time	MGate MB3180: 2,762,384 hrs MGate MB3280: 749,455 hrs MGate MB3480: 1,213,993 hrs
Standards	Telcordia SR332

Warranty

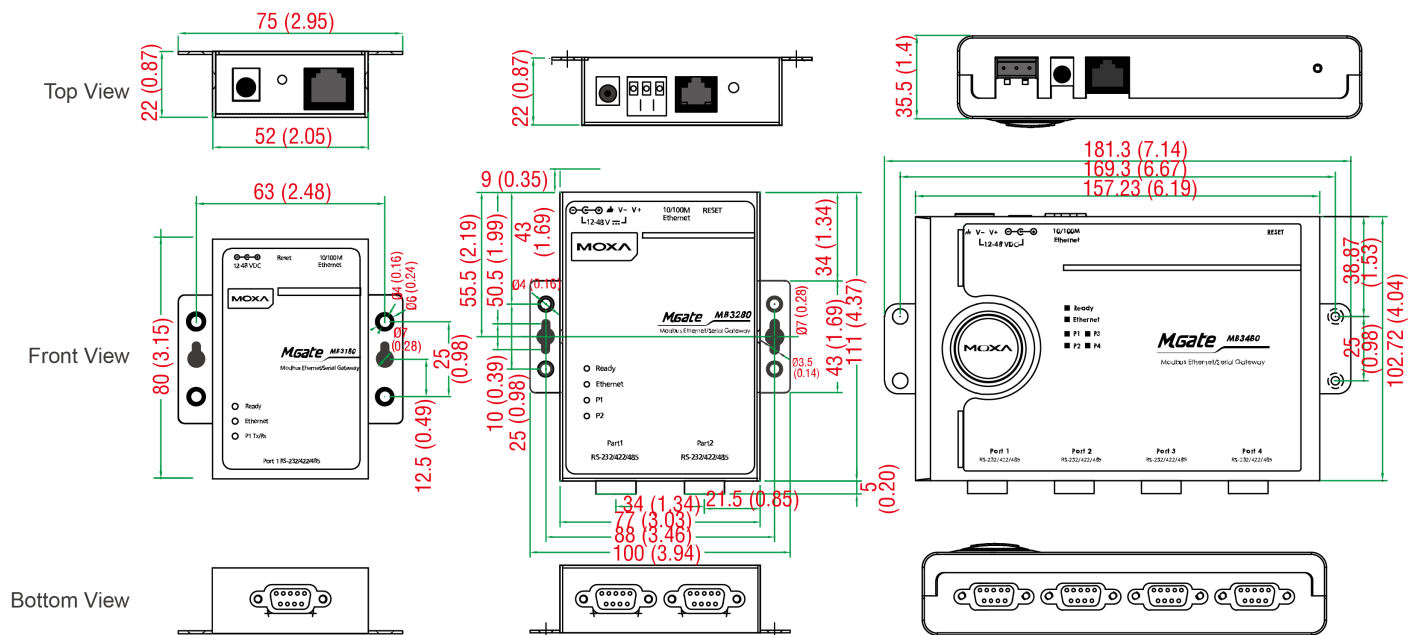
Warranty Period	5 years
Details	See www.moxa.com/tw/warranty

Package Contents

Device	1 x MGate MB3180/MB3280/MB3480 Series gateway
Power Supply	1 x power adapter, suitable for your region
Documentation	1 x quick installation guide 1 x warranty card

尺寸

單位：公釐（英吋）



訂購資訊

Model Name	No. of Serial Ports
MGate MB3180	1
MGate MB3280	2
MGate MB3480	4

配件（選購）

Cables

CBL-F9M9-150	DB9 female to DB9 male serial cable, 1.5 m
CBL-F9M9-20	DB9 female to DB9 male serial cable, 20 cm

Connectors

Mini DB9F-to-TB	DB9 female to terminal block connector
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DIN-Rail Mounting Kits

DK35A	DIN-rail mounting kit, 35 mm
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Wall-Mounting Kits

WK-35-01	Wall-mounting kit with 2 plates (35 x 44 x 2.5 mm) and 6 screws
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