

Item no.: 384730

MGATE MB3170-M-ST-T - Extended Modbus gateway with 1 port and 1 100BaseF(X)

from **519,11 EUR**

Item no.: 384730
shipping weight: 0.40 kg
Manufacturer: MOXA



Product Description

IntroductionThe MGate MB3170 and MB3270 are Modbus gateways with 1 and 2 connections respectively, which convert between the Modbus TCP, ASCII and RTU communication protocols. The gateways enable serial-to-Ethernet communication as well as serial (master) to serial (slave) communication. In addition, the gateways support the simultaneous connection of serial and Ethernet masters with serial Modbus devices. The MGate gateways of the MB3170 and MB3270 series can access up to 32 TCP masters/clients or establish a connection to up to 32 TCP slaves/servers. Routing via the serial ports can be controlled via IP address, TCP port number or ID assignment. Routing the serial ports by TCP port and IP address allows access by up to 4 TCP clients/masters (MB3270 models), while routing by ID mapping allows access by up to 32 TCP clients/masters (MB3170/MB3270). A priority control function enables immediate response to urgent commands. All models are robust, DIN rail mountable and offer optional built-in optical isolation for serial signals. Integration of TCP masters without changing the Modbus RTU/ASCII network or software. The MB3270 can integrate Modbus TCP with Modbus RTU/ASCII without changing the existing Modbus RTU/ASCII architecture or software. With the serial redirector function, a serial master can gain direct access to serial slave devices via a specially assigned serial port. This allows serial and TCP masters to access serial slaves simultaneously. Fibre optics for Ethernet communication. The MGate MB3170 series includes 100BaseFX fibre optic models that support transmission distances of up to 4 km for multimode models and up to 40 km for singlemode models. Fibre optic cables are well suited for industrial applications as they are immune to electromagnetic interference. In environments where high ground loop voltages are present, fibre optic provides the best insulation protection, and because there is no risk of sparking, fibre optic is safer than copper wire for use in hazardous environments. Auto-Device Routing for easy configuration. Moxa's Auto-Device Routing feature helps eliminate many of the problems and inconveniences faced by engineers who need to configure a large number of Modbus devices. A single mouse click is all it takes to set up a slave ID routing table and configure Modbus gateways to automatically recognise Modbus requests from a Supervisory Control and Data Acquisition (SCADA) system. Since the slave ID routing table no longer needs to be created manually, the auto device routing function saves engineers a lot of time and money. Priority control for urgent commands. As Modbus networks grow in size and complexity, the delay time between commands and responses becomes a major problem. Advanced models of the MB3000 series offer a priority control function for urgent commands, allowing the user to force certain commands to receive an immediate response. Depending on the requirements of your system, different methods are available to determine which commands receive priority. Ethernet interface- 10/100BaseT(X) ports (RJ45 connector): 2 (1 IP, Ethernet cascade), Auto MDI/MDI-X connection- Magnetic isolation protection: 1.5 kV (built-in)- Fibre optic Ethernet software functions- Industrial protocols: Modbus TCP client (master), Modbus TCP server (slave)- Configuration options: Web Console (HTTP/HTTPS), Device Search Utility (DSU), MGate Manager, MCC Tool, Telnet Console- Management: ARP, DHCP Client, DNS, HTTP, HTTPS, SMTP, SNMP Trap, SNMPv1/v2c/v3, TCP/IP, Telnet, UDP, NTP Client- MIB: RFC1213, RFC1317- Time management: NTP client- Security functions- Authentication: Local database- Encryption: HTTPS, AES-128, AES-256, SHA-256- Security protocols: SNMPv3, HTTPS (TLS 1.2)- Serial interface- Number of ports: MGate MB3170 models: 1, MGate MB3270 models: 2- Connection: MGate MB3170 models: DB9 connector for RS-232, terminal block for RS-422/485, MGate MB3270 models: 2 x DB9 connectors- Serial standards: RS-232/422/485 (software selectable)- Baud rate: 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- Pull high/low resistor for RS-485: 1 kilo-ohm, 150 kilo-ohm- Terminating resistor for RS-485: 120 ohms- Isolation: I models: 2 kV- RS-485 data direction control: ADDC (automatic data direction control) Serial signals- RS-232: Tx, D, Rx, D, 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 functions- Industrial protocols: Modbus RTU/ASCII Master, Modbus RTU/ASCII Slave- Modbus (Transparent)- Max. Max. number of client connections: 32- Max. number of server connections: 32- Max. number of server connections: 32- Performance parameters- Input voltage: 12 to 48 VDC- Input current: MGate MB3170/MB3270: 435 mA @ 12 VDC, MGate MB3170I/MB3170I-S-SC/MB3170I-M-SC/MB3170I-S-SC: 555 mA @ 12 VDC- MGate MB3270I/MB3170-M-SC/MB3170-M-ST: 510 mA @ 12 VDC- Power connection: 7-pin terminal block- Relay- Contact current carrying capacity: resistive load: 1 A @ 30 VDC- Physical properties- Housing: plastic- IP protection class: IP30- Dimensions (with ears): 29 x 89.2 x 124.5 mm (1.14 x 3.51 x 4.90 in)- Dimensions (without ears): 29 x 89.2 x 118.5 mm (1.14 x 3.51 x 4.67 in)- Weight: MGate MB3170 models: 360 g (0.79 lb), MGate MB3270 models: 380 g (0.84 lb)- Environmental limits- Operating temperature: standard models: 0 to 60°C (32 to 140°F), wide temperature range models: -40 to 75°C (-40 to 167°F)- Storage temperature (including packaging): -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: 6 kV; Air: 8 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- IEC 61000-4-6 CS: 10 V- IEC 61000-4-8 PFMF- IEC 61000-4-11- Potentially explosive atmospheres: ATEX, Class I Division 2, IECEx- Marine: DNV- Free fall: IEC 60068-2-32- Shock: IEC 60068-2-27- Vibration: IEC 60068-2-6, IEC 60068-2-64- Safety: UL 60950-1, IEC 60950-1, EN 62368-1, UL 508MTB- Time: MGate MB3170 models: 1,662,526 hours- MGate MB3170I models: 1,484,777 hours- MGate MB3270 models: 1,477,768 hours- MGate MB3270I models: 1,144,837 operating hours- MGate MB3170-M/S models: 1,580,051 operating hours- MGate MB3170I-M/S models: 1,385,414 hours- Standards: Telcordia SR332

Specifications

**Scan this QR code to
view the product**
All details, up-to-date
prices and availability



