

Item no.: 384610

## MGATE 5118 - 1-port CAN-J1939 to Modbus/PROFINET/EtherNet/IP gateways

from **503,03 EUR**

Item no.: 384610  
shipping weight: 0.60 kg  
Manufacturer: MOXA



### Product Description

The MGate 5118 industrial protocol gateways support the SAE J1939 protocol, which is based on the CAN bus (Controller Area Network). SAE J1939 is used for communication and diagnostics between vehicle components, diesel engine-generators and compression engines and is suitable for heavy-duty industry and emergency power systems. It is now common to use an engine control unit (ECU) to control these types of devices, and more and more applications are using PLCs for process automation to monitor the status of J1939 devices connected behind the ECU. The MGate 5118 gateways support the conversion of J1939 data to Modbus RTU/ASCII/TCP, EtherNet/IP or PROFINET protocols to support most PLC applications. Devices that support the J1939 protocol can be monitored and controlled by PLCs and SCADA systems that use Modbus RTU/ASCII/TCP, EtherNet/IP and PROFINET protocols. With the MGate 5118, you can use the same gateway in a variety of PLC environments. Key-in-Free J1939 Command The J1939 protocol is designed to retrieve a wide range of data from CAN-J1939 devices. To avoid having to enter all J1939 commands manually into the gateway, MGate 5118 gateways can automatically recognise the output commands used by the CAN device. With a single click in the web console, all output commands from your CAN device are automatically recognised by the gateway. The commands are displayed in the command list of the web console and can then be further modified by the user if required. The MGate 5118 gateways make it much easier for users to connect PLCs to CAN devices. A variety of maintenance functions The MGate 5118 gateways support a web console for easy configuration and maintenance, and the built-in traffic monitoring function monitors J1939 protocol traffic so that users can monitor the status of connected CAN devices, including error count, packet count and bus offline. The traffic monitoring function can also be used to troubleshoot CAN devices. The diagnostic tool helps the user to check the settings of the CAN device and indicates the availability of the CAN device by reading the J1939 network address. In addition, the MGate 5118 gateways have an integrated live list function when two or more J1939 devices are connected to the same CAN bus. This function displays the PGN and the address of the packets transmitted by each device so that the user can measure the utilisation of the CAN bus. To detect loose cables, the MGate 5118 gateways support the status monitoring and fault protection functions. The status monitoring function notifies a PLC if the cable between the gateway and the CAN device is loose. In addition, the fault protection function executes actions predefined by the user if the cable between the gateway and the PLC is loose. 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 (Master), Modbus TCP Server (Slave), PROFINET IO Device, EtherNet/IP Scanner, EtherNet/IP Adapter- Configuration options: Web Console (HTTP/HTTPS), Device Search Utility (DSU), Telnet Console- Management: ARP, DHCP Client, DNS, HTTP, HTTPS, SMTP, SNMP Trap, SNMPv1/v2c/v3, TCP/IP, Telnet, SSH, 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, SNMPv2c Trap, HTTPS (TLS 1.3) Serial interface- Console connection: RS-232 (Tx, Rx, GND), 8-pin RJ45 (115200, n, 8, 1)- Number of ports: 1- Connection: DB9 connector- Serial standards: RS-232/422/485- Baud rate: 50 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- Pull high/low resistance for RS-485: 1 kilo-ohm, 150 kilo-ohm- Terminating resistor for RS-485: 120 Ohm- Isolation: 2 kV Serial signals- RS-232: Tx, Rx, 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- Configuration options: Serial console- Industry protocols: J1939, Modbus RTU/ASCII Master, Modbus RTU/ASCII Slave Modbus RTU/ASCII- Mode: Master, Slave- Supported functions: 1, 2, 3, 4, 5, 6, 15, 16, 23- Max. number of commands: 128 Number of commands: 128 Modbus TCP- Operating mode: Client (master), Server (slave)- Supported functions: 1, 2, 3, 4, 5, 6, 15, 16, 23- Max. number of client connections: 16- Max. number of server connections: 32 Max. number of server connections: 32- Max. number of commands: 128 Number of commands: 128 PROFINET- Mode: IO device- Max. number of IO controller connections: 1 (for read/write)- Input data size: 512 bytes- Output data size: 512 bytes EtherNet/IP- Mode: Scanner, Adapter- Supported CIP objects: Identity, Message Router, Assembly, Connection Manager, TCP/IP Interface, Ethernet Link, Port- Max. number of scanner connections: 1 (for read-only), 1 (for read/write)- Max. number of adapter connections: 4- Input data size: 496 bytes- Output data size: 496 bytes CAN interface- Industry protocols: J1939- Number of ports: 1- Connector: Spring Euroblock terminal- Baud rate: 250 Kbps, 500 Kbps, 1 Mbps- Terminating resistor: 120 Ohm- Isolation: 2 kV (built-in) J1939- Max. number of commands: 256- Max. number of commands: 256- Input data size: 2048 bytes- Output data size: 2048 bytes Memory- microSD slot: Up to 32 GB (SD 2.0 compatible) Performance Parameters- Input Voltage: 12 to 48 VDC- Input Current: 416 mA @ 12 VDC- Power Connection: Spring Euroblock Terminal Relay- Contact Current Rating: Resistive Load: 2 A @ 30 VDC Physical Characteristics- Housing: Metal- IP Rating: IP30- Dimensions: 45.8 x 105 x 134 mm (1.8 x 4.13 x 5.28 in)- Weight: 589 g (1.30 lb) Environmental conditions- Operating temperature MGate 5118: 0 to 60°C (32 to 140°F)- Operating temperature MGate 5118-T: -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- Safety: EN 62368-1, UL 61010-2-201- EMC: EN 61000-6-2/-6-4- EMI: CISPR 32, 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: 4 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- Hazardous areas: ATEX, Class I Division 2, IECEx- Free fall: IEC 60068-2-32- Shock: IEC 60068-2-27- Vibration: IEC 60068-2-6, IEC 60068-2-64 MTBF- Time: 727,873 hours- Standards: Telcordia SR332

### Specifications

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