

Product Overview

Xentino Industrial-grade **MR400-G/MR401-G** series 4G LTE Cellular Routers are highly reliable and secure wireless communications gateway designed for Industrial IoT and M2M applications. Featuring the flexible LAN/WAN Ethernet options, the **MR400-G** provides 1-port 10/100 Base-TX Ethernet interface and the **MR401-G** have 3-port 10/100 Base-TX Ethernet interfaces. With GPS function, the **MR400-G/MR401-G** series can track accurately the router location and display sync time for quickly managing existing devices. It is equipped with dual SIM that support failover and roaming over to ensure uninterrupted connectivity.

Supporting RS232, RS485 and DI/DO, the **MR400-G/MR401-G** series allow you to customize your professional applications in diverse environments. The device is administrated via web GUI, Telnet, SSH v2 and HTTP/HTTPS. It also provides enterprise-grade software features, such as Modbus for SCADA system or M2M connectivity, and MQTT for M2M application. The critical VPN security supports IPSec, OpenVPN, and GRE, etc. to enhance encryption for authentication and transmission for a wide range of applications and vertical machine-to-machine (M2M) markets.

Built for secure and uninterrupted operation in harsh environments, the **MR400-G** and the **MR401-G** offer operating temperature from -20 to 70°C and a flexible input voltage range of 10-32V DC. Having trusted industrial-grade certificates, **Xentino MR400-G/MR401-G** series are best choices for mission-critical cellular communications.



Key Features

- Highly reliable and secure for mission-critical cellular communications
- Provide flexible options to configure LAN/ WAN ports
- Support multi-band connectivity with FDD LTE/ TDD LTE/ WCDMA/ GSM/ LTE Cat4
- Built-in dual SIM for network redundancy
- Integrated dual detachable antenna against radio interference
- LED indicators for connection and data transmission status
- Industrial rated from -20 to +70°C for use in harsh environments
- Metal Housing with IP40 industrial grade protection
- IPv6/IPv4 dual stack and all applications are IPv6 ready
- Support various serial communication protocols for rich connectivity
- Enhance security and encryption for authentication and transmission



Ordering Information

Model	Description
MR400-G	Industrial 4G LTE Cellular Router (1 x WAN, 1 x LAN, 2 x RS232, 1 x RS485, 2 x DI, 1 x DO, 2 x SIM Card Slots, 1xGPS, -20 ~ +70°C)
MR401-G	Industrial 4G LTE Cellular Router (1 x WAN, 3 x LANs, 2 x RS232, 1 x RS485, 2 x DI, 1 x DO, 2 x SIM Card Slots, 1xGPS, -20 ~ +70°C)

Specifications

LTE Interface

- FDD LTE: B1/B3/B5/B7/B8/B20
- TDD LTE: B38/B40/B41
- WCDMA: B1/B5/B8
- GSM: 900/1800 MHz
- LTE Cat4

Processor & I/O Interface

- High performance 528 MHz CPU with 512 Mbytes of DDR3 memory
- 2 x SIM Card Slots
- 1 x LAN 10/100 Mbps Ethernet port (Model: **MR400G**)
- 3 x LAN 10/100 Mbps Ethernet ports (Model: **MR401G**)
- 1 x WAN 10/100 Mbps Ethernet port
- Reset Button
- Console: 1 x RS232 (9-pin Sub-D)
- 2 x SMA connectors for detachable LTE antenna
- 1 x GPS detachable antenna (Optional)
- 1 x RS485 (D+/D-)
- 1 x RS232 (TXD/RXD)
- 2 x DI, 1 x DO (Alarm +/-)

Physical Characteristics

- Enclosure : Metal Shell
- Housing : IP40 Protection
- Dimensions (W x H x D) : 60 x 110 x 106 mm
- Weight : 451 g (0.9943 lb) / 452 g (0.9965 lb)
(Model: **MR400G/MR401G**)
- Installation : DIN Rail (Default) or Wall Mount (Optional)

LED Display

- 1 x System status LED (Green)
- 1 x VPN status LED (Green)
- 1 x SIM1 status LED (Green)
- 1 x SIM2 status LED (Green)
- Ethernet status LEDs (Green for LINK/ACT, Yellow for SPEED)
- 2 x Mobile connection strength LEDs (Green)

Power Supply

- Power Consumption 7 Watts(Max)
- Power Input 10 ~ 32V DC

MTBF (mean time between failures)

- **MR400G** : 155,899 hrs (MIL-HDBK-217-FN2)
- **MR401G** : 148,930 hrs (MIL-HDBK-217-FN2)

Software

Network Protocols:

- IPv4, IPv6, IPv4/IPv6 dual stack, DHCP server and client, PPPoE, Static IP, SNTP, GPS sync time, DNS Proxy, Modbus, VRRP, OSPF, Message Queue Telemetry Transport (MQTT Broker), BGP

Routing/Firewall:

- NAT, Virtual Server, DMZ, MAC Filter, URL Filter, IP Filter, VLAN, Static Routing and RIP-1/2

VPN:

- OpenVPN, IPSec (3DES, AES128, AES196, AES256, MD5, SHA-1, SHA256), GRE, PPTP, L2TP

Wireless Connectivity:

- Two SIM for failover/ roaming over/ back up
- Two SIM data usage control
- Seamless multi WAN connections switch

Others:

- DDNS, QoS, Virtual COM, UPnP

Alarm:

- DI, DO, SMS, VPN/WAN Disconnect, SNMP Trap, E-mail

Management Software

- Web GUI for remote and local management, CLI
- Dual Image firmware upgrade by Web GUI
- Syslog monitor
- SNMP, TR069
- Remote management via SSH v2, HTTPS
- Local management via Telnet, SSH v2, HTTP/HTTPS

Environment

- Operating Temperature -20 ~ +70°C
- Storage Temperature -40 ~ +85°C
- Ambient Relative Humidity 10 ~ 95% (non-condensing)
- Humidity 0 ~ 95% (non-condensing)

Standards and Certifications

- **EMC** : CE, FCC
- **EMI** : EN 55032 Class A, FCC Part 15 Subpart B Class A
- **EMS** : EN 55024 / EN 61000-4-2 (ESD) Level 3 / EN 61000-4-3 (RS) Level 3 / EN 61000-4-4 (EFT) Level 4 / EN 61000-4-5 (Surge) Level 3 / EN 61000-4-6 (CS) Level 3 / EN 61000-4-8 (PFMF) Level 4 / EN 61000-4-11 / EN 61000-6-2 (Industrial) / EN 61000-6-4 (Industrial)
- **Rail Traffic** : EN50121-4
- **Vibration** : IEC60068-2-6
- **Safety** : EN60950-1
- **Highly Accelerated Life Test (HALT)**

Dimensions

