

MaxGate600-2GT-LTE-8D485-8IO

DIN-Rail ARM Cortex-A8 Industrial Intelligent Gateway



- Support 2 Gigabit cooper ports, 1 4G LTE antenna interface, 8 RS485 serial ports (with 8 DC12V outputs) and 8 I/O ports (1 DI+2 DO+5 AI), providing users with flexible networking methods
- Provides application layer programming sample code to facilitate secondary development
- Support multiple network protocols, built-in TCP/IP protocol stack
- Support 1 AC85~264V / DC110~370V AC/DC power input, 1 DC12V backup power input, and support dual power supply redundancy
- High-strength aluminum alloy casing, IP40 protection level, fanless casing for heat dissipation, the equipment can reliably work in harsh industrial environments of -40℃~+75℃





Product Description

MaxGate600-2GT-LTE-8D485-8IO is a rail-type ARM Cortex-A8 industrial intelligent gateway carefully designed by Wuhan Maiwe Communications Co., Ltd. It Support 2 Gigabit electrical ports, 1 4G antenna, 8 RS485, 8 I/O ports, 1 USB2.0 interface; adopts high-performance and low-power 32-bit ARM Cortex-A8 processor with a main frequency of 1GHz, equipped with 1GByte DDR3, 8GByte eMMC, 64MByte SPI Nor Flash, based on Medip-X3 The platform is designed to run smoothly, and with abundant hardware resources and a variety of peripheral interfaces, the data collected by the terminal device can be transmitted through the network ports of two independent IP network segments of the device or on the 4G cellular network.

This product has rich protocols, strong stability, good tailorability and scalability, comprehensive support for various communication interface drivers, and Support a variety of hardware platforms and architectures; it provides onboard 8GByte eMMC storage and external USB2. 0 HOST interface, which facilitates customers' secondary development, has the possibility of application self-recovery, and can realize system redundancy function through multiple backup methods. The product provides AD220V power supply and interface with DC12V backup power supply, which facilitates flexible configuration of on-site power supply. The hardware adopts high-standard industrial protection design, selects industrial-grade components, and uses high-strength aluminum alloy casing, which is sturdy and durable; low power consumption, wide temperature design, fanless casing heat dissipation, Support -40°C~+75°C operating temperature, passed Strict safety regulations and EMC testing meet the application requirements of harsh industrial environments. Products can be widely used in industrial automation, integrated energy, smart cities, smart transportation, smart mines, smart factories and other fields.



Features and Benefits

- Using 32-bit ARM Cortex-A8 processor with a main frequency of up to 1GHz
- Based on Linux4.0 or above kernel
- Support 1GB DDR3 memory and 8GB eMMC storage
- Support multiple file systems and multiple network protocols
- Support image upgrade function
- Support network card, serial port, RS485, GPIO, eMMC, SPI, I2C, RTC, built-in Watchdog, USB and other drivers, and provides application layer programming sample code and a general cross-compilation environment to facilitate secondary development
- Two 1000M copper ports support independent IP and MAC addresses
- Support simple WEB page management and can develop customized WEB interfaces for secondary use
- Support 4G cellular wireless network, compatible with 3G/2G, Support China Mobile/China Unicom/Telecom 4G, China Unicom 3G, China Mobile/China Unicom 2G



Specification

System Information	
processor	ARM Cortex-A8 32-Bit, clocked at 1GHz
OS	Openwrt-18.06 (Linux4.9.184 kernel)
memory	1GB DDR3
storage	8GB eMMC
Software	
network	Domain name resolution DNS, DHCP, static IP functions. 4G full network dial-up Internet access, support operator private network APN. Support Ping watchdog 4G network online status monitoring, automatic redialing when disconnected, and automatic restart when disconnected continuously.



Specification

system	<p>Network diagnostic function: Support Ping, Traceroute, Tcpdump (network packet capture tool).</p> <p>Support WAN port mode configured as LAN mode.</p> <p>Support setting local time, NTP time synchronization function, built-in RTC power-off time retention.</p> <p>Support WEB local upgrade, remote upgrade, remote monitoring, etc..</p> <p>Support local logs, remote logs, log hierarchical display, and save important logs after power failure.</p> <p>Watchdog function, automatic detection of network disconnection, automatic restart if dial-up fails, one-click restoration of factory default configuration.</p> <p>Support immediate restart and scheduled restart, and Support custom scheduled tasks.</p>
other	<p>Support SSH and TELNET login.</p> <p>Support FTP, SCP, NTP, DHCP, TFTP and other protocols.</p> <p>Support SNMP Agent and Trap reporting functions.</p>
<h3>4G Cellular Network</h3>	
network format	LTE-FDD、LTE-TDD、WCDMA、GSM
working frequency	<p>LTE-FDD: B1/3/5/8</p> <p>LTE-TDD: B34/38/39/40/41</p> <p>WCDMA: B1/5/8</p> <p>GSM: 900/1800MHz</p>
maximum transfer rate	<p>LTE:</p> <ul style="list-style-type: none"> LTE-FDD: DL 150Mbps/ UL 50Mbps LTE-TDD: DL 130Mbps/ UL 30Mbps <p>UMTS:</p> <ul style="list-style-type: none"> HSPA+: DL 21Mbps HSUPA: UL 5.76Mbps WCDMA: DL 384kbps/ UL 384kbps <p>GSM:</p> <ul style="list-style-type: none"> EDGE: DL 236.8kbps/ UL 236.8kbps GRPS: DL 85.6kbps/ UL 85.6kbps
(theoretical value)	<p>LTE-FDD/TDD: 23dBm±2dB</p> <p>WCDMA: 24dBm+1/-3dB</p> <p>DCS1800: 30dBm±2dB</p> <p>EGSM900: 33dBm±2dB</p>

Specification

maximum transmit power	<p>LTE-FDD: -98.1dBm(B1)/ -97.1dBm(B3)/ -98.9dBm(B5)/ -97.4dBm(B8)</p> <p>LTE-TDD: -96.6dBm(B34)/ -96.7dBm(B38)/ -97.6dBm(B39)/ -97.4dBm(B40) / -95dBm(B41)</p> <p>WCDMA: -109.4dBm(B1) / -109.7dBm(B5) / -110.2dBm(B8)</p> <p>DCS1800: -107dBm</p> <p>EGSM900: -109dBm</p>
RX Sensitivity	
specifications of ports	2 channels of 10/100/1000Base-T(X) auto-sensing 1000M electrical ports, supporting full/half duplex, auto MDI/MDI-X, each copper port has independent IP and MAC address.
1000M copper port	<p>Serial port type: 8 RS485</p> <p>Connection method: RJ45</p> <p>Baud rate: 1200bps-115200bps</p> <p>Data bits: 5bit, 6bit, 7bit, 8bit</p> <p>Stop bit: 1bit, 2bit</p> <p>Check digit: None, Odd, Even</p>
serial port	<p>Number of channels: 1 DI input</p> <p>Connection method: 3.81mm pitch 6PIN terminal block, DI occupies 2 positions</p> <p>Input type: level signal</p> <p>Level range: wet contact (logic level 0: no external power input; Logic level 1: with external DC 9~18V external power input)</p>
DI digital input	<p>Number of channels: 1 DI input</p> <p>Connection method: 3.81mm pitch 6PIN terminal block, DI occupies 2 positions</p> <p>Input type: level signal</p> <p>Level range: wet contact (logic level 0: no external power input Logic level 1: with external DC 9~18V external power input)</p>
DO digital output	<p>Number of channels: 5 AI inputs</p> <p>Input mode: voltage mode</p> <p>Input range: 0~10VDC</p> <p>Resolution: 1%</p>
AI analog input	1 SMA-K (external thread internal hole) antenna Interface, used to connect 4G cellular antennas.
antenna interface	1 standard SIM card (1.8V/3V) slot, Support China Mobile/China Unicom/Telecom 4G, China Unicom 3G, China Mobile/China Unicom 2G (small card needs to be used with a card holder)
SIM card	1 CONSOLE port, RS232 signal RJ45 port, used for device debugging and command line configuration
CONSOLE	1 Type-A USB 2.0 interface (HOST), expandable storage
USB	Restart or restore factory settings with one click



Specification

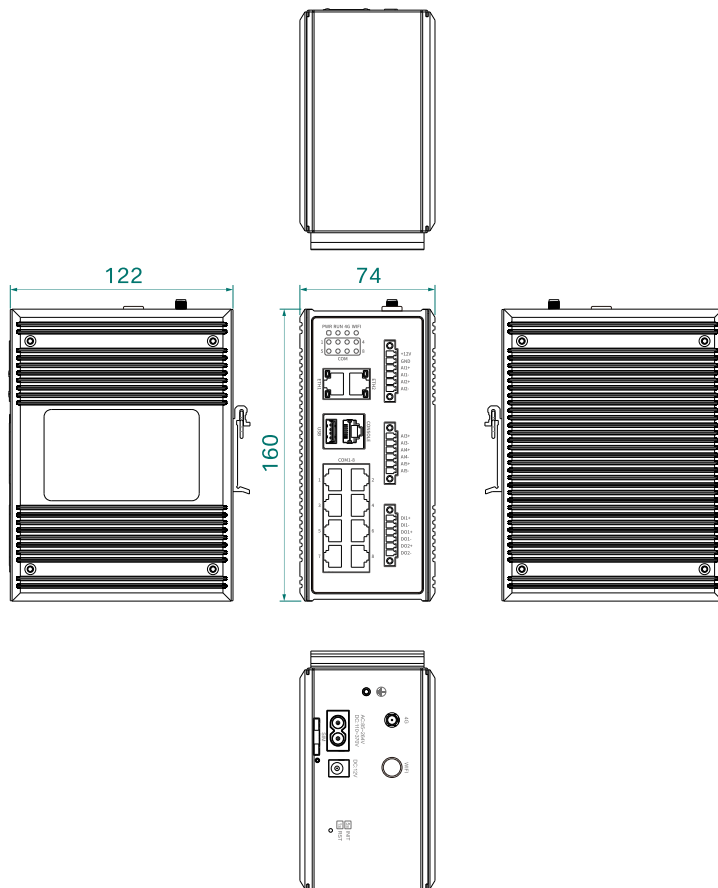
indicator light	Power indicator light, running indicator light, 4G indicator light, WiFi indicator light(reserved), serial port indicator light, electrical port speed and connection/activity indicator light.
Power Supply	
power input	1 AC85~264V / DC110~370V AC/DC power input, 2PIN AC socket (8-shaped); 1 channel DC12V (DC9~18V) DC power input, which can be used for external battery input, DC round head; When dual power supplies are input at the same time, power supply redundancy is supported.
power output	9 channels of DC12V DC power output, 8 of which share RJ45 with the RS485 serial port, can be used to power serial port terminal equipment; 1 channel uses a 3.81mm pitch 6PIN terminal block, the power supply occupies 2 positions, and can be used to power IO terminal equipment; 9 channels of power output Total power < 7.2W@DC12V
full load power consumption	<5.5W@AC220V (excluding DC12V output load)
Physical Characteristics	
dimension	160×74×122(mm)(excluding rails)
installation method	Easy installation on 35mm DIN rails
chassis protection	IP40
weight	About 1.1kg (excluding antenna)
Working Environment	
operating temperature	-40℃~+75℃
storage temperature	-40℃~+85℃
relative humidity	5%~95% (non-condensing)
Industry Standard	
EMC	IEC 61000-4-2 (ESD): Level 4 (contact discharge ±8kV, air discharge ±15kV) IEC 61000-4-5 (Surge): Level 3 (power supply: common mode ±2kV, differential mode ±2kV; Network port: common mode ±6kV, differential mode ±2kV; Serial port: common mode ±4kV, differential mode ±2kV) IEC 61000-4-4 (EFT): Level 4 (power supply: ±4kV; network port, serial port: ±2kV)

☑☑☑ Specification

Certification	CE, FCC, RoHS, CCC
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☑ Installation Dimensions

Unit:mm(first angle projection)





Ordering Information

Standard Model	1000M Cooper Port	4G Antenna	RS485	DI	DO	AI	Input Voltage
MaxGate600-2GT-LTE-8D485-8 IO-AD220	2	1	8	1	2	5	AC85~264V / DC110~370V

Contact Us

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