

USR-G807 Specification

4G industrial LTE VPN router



Product Description

The USR-G807 is an IoT cellular router that integrates 4G LTE, Wi-Fi, and VPN technologies to provide an easy, reliable, secure Internet connectivity and high-speed data access for equipment networking. With technologies such as 4G wireless wide area network, Dual Ethernet ports (LAN + WAN), Wi-Fi wireless local area network it provides uninterrupted multiple network access capabilities.

The G807 is a sister product of the G806 series offering a choice of (3-wire) RS485/232. This means that RS485/232 devices, such as electricity meters, programmable logic controllers including Modbus RTU equipment can connect to the internet directly through the router. The product adopts high-performance CPU, working frequency up to 580MHz, based on a variety of hardware interfaces and powerful software functions, users can quickly build their own application network.

The G807 occupies a very small footprint and supports industrial protocols and accessories to ease integration which is suitable for large-scale distributed industrial applications, such as smart express cabinets, charging piles, CCTV, ATM machines, ticket machines, traffic management, vending machines, medical device networking, tower monitoring, lifts monitoring, digital signage, electricity, water conservancy, environmental protection, etc.

Product Features

■ Stable And Reliable

- Metal shell, IP30 protection. Ethernet ports support 1.5KV isolation transformer protection.
- Wide operating temperature. Wide voltage input, reverse polarity protection.
- ESD, Surge, EFT protection.
- Embedded hardware watchdog, self-recovers from malfunctions, maintaining high device availability.

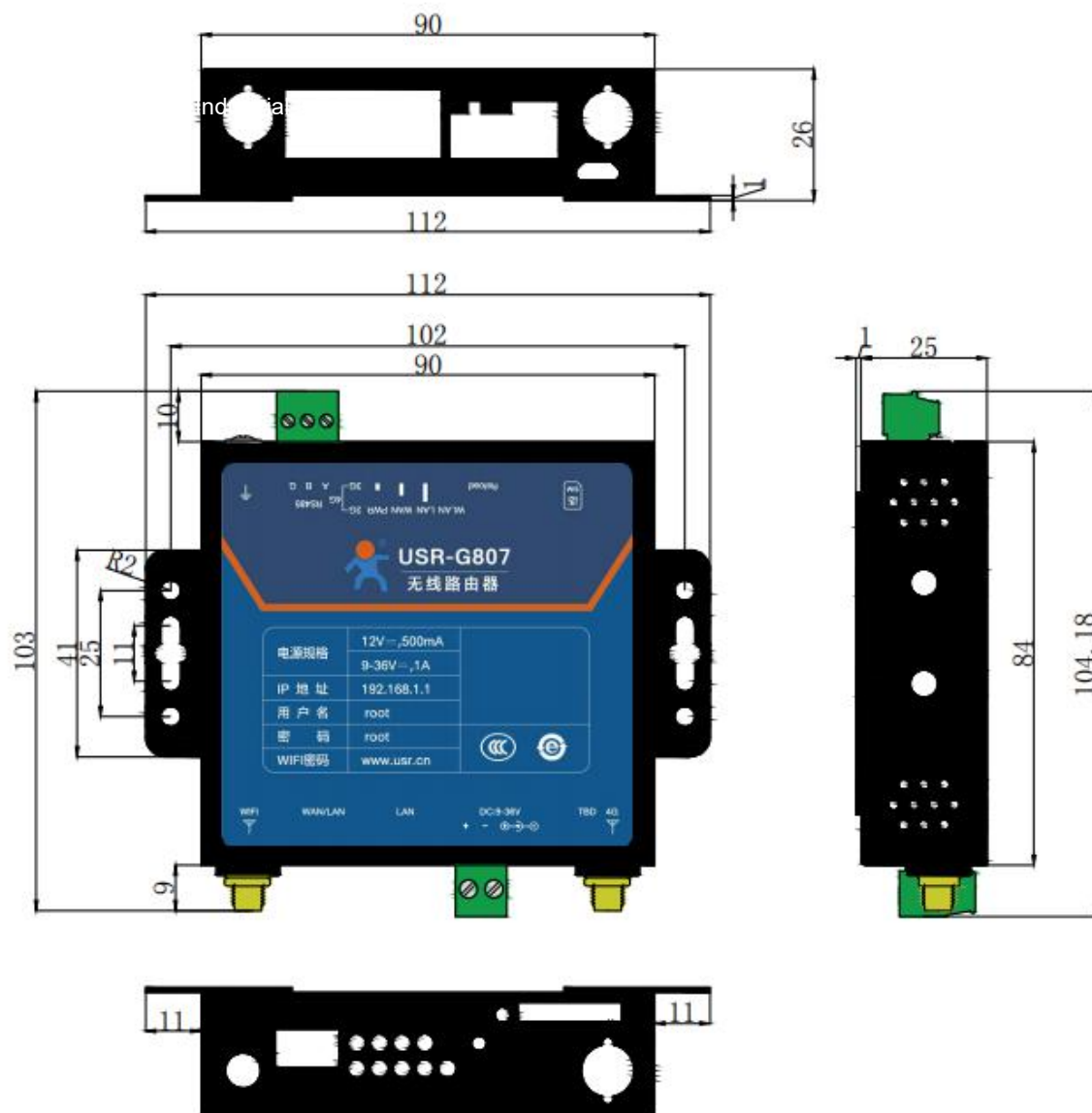
■ Uninterrupted network access

- Supports 2G/3G/4G network all over the world ,supports APN/VPDN sim card.
- Failover between 4G and WAN, ensures automatic switch to alternative backup connection, effectively ensuring uninterrupted data transmission.
- VPN tunnel detection: maintains stable connection of the VPN tunnel, ensuring continuous transmission.
- Multi-layer link detection mechanism, automatic redial and recovery.

■ Rich functions

- Supports PUSR cloud platform to facilitate remote monitoring and central management of large-scale device networks.
- Supports remote monitoring, upgrade and parameter configuration, remote access to the built-in web pages.
- Supports email alarm, SMS alarm, abnormal alarm push in time.
- Dual Ethernet ports, WAN/LAN.
- Multiple VPN protocols.
- Wall-mounting and DIN-rail mounting options available, easy to install.
- Supports IPsec VPN, PPTP, L2TP, OPENVPN, GRE etc., ensuring secure data transmission.
- Supports firewall functions including NAT, access control, DDoS defense, IP-MAC binding, etc., protecting the network against external attacks.
- Supports WLAN, scaling more devices access.
- Supports APN automatic inspection ,mode switch ,SIM information display, supports private sim card.
- Supports DDNS, PPPOE, DHCP, Static IP.
- Allows multiple network management methods including SSH, WEB, TELNET and a network management platform.
- Provides wireless data communications between field serial devices and the central control system.
- Supports user-defined register & heartbeat packets, transparent TCP/UDP protocol, multi-center.

Dimensions



USR-G807 Dimensions

- Unit: mm.
- Installation Method: 35mm DIN-rail mounting, Panel mounting
- Dimensions: 112 * 84.0* 25.0mm(L*W*H). Power terminal, serial terminal, antenna connector are not included.

Specifications

| Hardware Specifications | | |
|--------------------------|--|---|
| Cellular Interface | Antenna | 1 x SMA-K Note: North America models: 2 x SMA 4G antenna connectors. |
| | SIM card | 1 x (3 V & 1.8 V) Standard 2FF SIM, drawer-type sim card slots |
| Ethernet | 1 x WAN port (can be configured to LAN) 10/100 Mbps, compliance with IEEE 802.3, supports auto MDI/MDIX,1.5KV network isolation transformer protection | |
| | 1 x LAN port, 10/100 Mbps, compliance with IEEE 802.3, IEEE 802.3u standards, supports auto MDI/MDIX,1.5KV network isolation transformer protection | |
| Indicators | LED | <p>PWR: always on after powered on</p> <p>WLAN: always solid on when WiFi is enabled and working properly</p> <p>WAN: solid when cable is connected, blinking when data is transmitting and receiving</p> <p>LAN: solid when cable is connected, blinking when data is transmitting and receiving</p> <p>2/3/4G mode indicator:</p> <p>2G led is on after connected to 2G network</p> <p>3G led is on after connected to 3G network</p> <p>Both leds is on after connected to 4G network</p> <p>Signal strength: 4 solid bars, strongest signal</p> |
| WiFi Interface | Standards & Frequency | IEEE 802.11b/g/n,2.4GHz, AP mode |
| | Data speed | IEEE 802.11b/g,maximum 54Mbps.IEEE 802.11n,maximum 150Mbps |
| | Antenna | 1 x SMA-K |
| | Transmission distance | 80 meters by line of sight.Actual transmission distance depends on environment of the site. |
| Power Supply | Adaptor | DC 12V/1A |
| | Connector | DC Power Jack Barrel Type Female 5.5*2.1mm Round socket or 2 PIN 5.08mm industrial terminal block,reverse polarity protection |
| | Input voltage | DC 9~36V |
| | Working power | Average 270mA/12V |
| Serial Interface | RS485/RS232(alternative) | 3 PIN 3.81mm industrial terminal block. Note:RS485 default,RS232 please contact sales. |
| | Baud rate(bps) | 1200,2400,4800,9600,19200,38400,57600,115200,230400 |
| | Data bits | 8 |
| | Stop bits | 1,2 |
| | Parity | NONE,ODD,EVEN |
| Physical Characteristics | Housing | Metal shell,IP30 |
| | Dimensions | 112.0*84.0*25.0 mm(L*W*H) |
| | Installation method | Panel mounting, DIN-Rail mounting |
| | EMC | <p>Static IEC61000-4-2, level 2</p> <p>Pulsed Electric Field IEC61000-4-4, level 2</p> <p>Surge IEC61000-4-5, level 2</p> |

| | | |
|-------------|-----------------------|---|
| | Operating temperature | -20℃~+70℃ |
| | Storage temperature | -40℃~+125℃ |
| | Operating humidity | 5%~95%RH (non-condensing) |
| Others | Reload | Pinhole reset button |
| | TBD | Debug interface (TTL Level) |
| | Embedded Watchdog | Device runs self-detection, auto recovers from malfunctions |
| Certificate | CE,CCC | |

Software Specifications

| | | |
|--------------------|-------------------|--|
| Network Connection | WAN protocol | PPP, PPPoE, DHCP client |
| | LAN protocol | ARP, DHCP server, NAT |
| | 4G network access | Auto APN/VPDN, private network Access authentication: CHAP/PAP |
| | WLAN security | Open system,WPA/WPA2 PSK TKIP/AES encryption |
| | IP routing | Static routing |
| | Network diagnosis | Ping,route trace,DNS |
| Serial modem | Work mode | NET,HTTPD |
| | Sockets | 4 sockets,4 centers ,TCPS(SOCKA)/TCPC/UDPS/UDPC |
| | Modbus RTU toTCP | Support |
| Device management | Configuration | Web |
| | Remote management | Telnet, SSH, AT command,SNMP |
| | PUSR platform | Remote monitoring,remote upgrade,alarming,base station location,remote access to web pages of the router |
| Security | Failover backup | Failover between 4G and WAN, ensures automatic switch to alternative backup connection |
| | Firewall | DMZ, anti-DoS, Filtering (IP/Domain name/MAC address), Port Mapping, Access Control |
| | VPN | Supports PPTP, L2TP, GRE, IPSEC VPN (IKEv1), OPENVPN protocols |
| Service | DDNS | Remote access the device through domain name |
| | Alarm | Email,SMS |
| | Others | NTP client Timing task |

Ordering guide

| USR-G807 Ordering Guide | | |
|-------------------------|--|--|
| Model | USR-G807-EUX | |
| Region | EMEA | |
| Frequency | TDD-LTE | B38/B40/B41 |
| | FDD-LTE | B1/B3/B7/B8/B20/B28A |
| | WCDMA | B1/B8 |
| | GSM/GPRS/EDGE | B3/B8 |
| Model | USR-G807-AFX(Coming Soon) | |
| Region | North America(AT&T) | |
| Frequency | FDD-LTE | B2/B4/B5/B12/B13/B14/B66/B71 |
| | WCDMA | B2/B4/B5 |
| Model | USR-G807-AUX(Coming Soon) | |
| Region | Australia & Latin America & New Zealand & Taiwan | |
| Frequency | TDD-LTE | B40 |
| | FDD-LTE | B1/B2/B3/B4/B5/B7/B8/B28 |
| | WCDMA | B1/B2/B4/B5/B8 |
| | GSM/EDGE | B2/B3/B5/B8 |
| Model | USR-G807 | |
| Region | Part of APAC, please confirm the frequencies | |
| Frequency | TDD-LTE | B38/39/40/41 |
| | FDD-LTE | B1/B3/B5/B8 |
| | WCDMA | B1/B8 |
| | TD-SCDMA | B34/B39 |
| | EVDO/CDMA1X | CDMA1X/ 1xEV-DO rel.0/ 1xEV-DO rev. A: 800 MHz |
| | GSM/CPRS/EDGE | 900/1800MHz |

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