

**Communication Expert of** 

**Industrial IOT** 

# **USR-G806p Specification**

## **4G Industrial Router Pioneer**



USR-G806p is a flagship industrial router with 5 network ports, built with a high-end Qualcomm CPU solution in the industry. It integrates multiple hardware interfaces, including: 5 network ports (1WAN + 1WAN/LAN + 3LAN), dual serial ports (1×RS232 + 1×RS485), enhanced Qualcomm Wi-Fi, GNSS positioning, and dual external card slots. Users can quickly build their own application networks with it.

Designed for harsh industrial environments, with industrial-grade standards: wide temp. -40°C~75°C, DC 9~48V power, EMC 3B protection. Rigorously tested, built-in dual watchdog & self-recovery, reliable across industries.

This product is widely used in scenarios such as meteorological monitoring systems, store cash register monitoring systems, energy storage power station systems, agricultural environment monitoring systems, and smart water affairs systems.

### **Product Features**

#### Stable and reliable

- Industrial grade design, wide temperature-40°C~75°C, sheet metal housing, IP30 protection;
- Support horizontal desktop placement, wall hanging and rail installation;
- Wide voltage DC 9-48V input, with power reverse protection;
- Multiple hardware protection such as static electricity, surge and electric fast pulse group;

#### Flexible networking

- Provide 4G network system;
- Cellular network theoretical rate: Download: 150Mbps / Uplink: 50Mbps

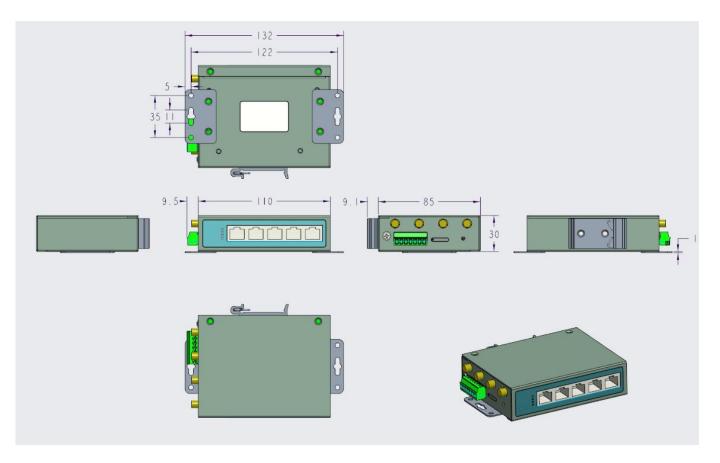
(interference exists in the real environment, based on actual measurement);

- Support automatic network inspection, 4G/3G/2G mode switching, support APN/VPDN private network card;
- Supports dual SIM card redundancy;
- Support 3LAN+1WAN/LAN+1WAN, 10/100Mbps rate ;
- Supports simultaneous online of multiple networks such as wired, 4G and WIFI, and intelligent switching and

#### Powerful

- Supports TCP/UDP/Modbus TCP to Modbus RTU/MQTT data acquisition capability;
- Supports GNSS positioning services, and can report GPS/Beidou positioning data through WEB configuration and screening;
- Supports PUSR Cloud services to facilitate centralized management of device systems and improve operation and maintenance efficiency;
- Supports VPN (PPTP, L2TP, IPSec, OpenVPN, GRE) and supports VPN encryption function;
- Support dynamic domain name (DDNS), PPPoE, DHCP, static IP functions;
- Supports access restrictions for firewalls, NAT, and black and white lists, and supports SNAT and DNAT

## **Product Size**



USR-G806p Product Size

## Hardware Specifications

USR-G806p Specification		
Cellular		TDD-LTE:Band 34/38/39/40/41
	Global Wide Band	FDD-LTE: Band 1/2/3/4/5/7/8/12/13/18/19/20/25/26/28/66
		WCDMA:B1/2/4/5/6/8/19
		GSM: B2/3/5/8
	Theoretical Rate	Download: 150Mbps/Uplink: 50Mbps;
		Take the on-site measurement as the standard
	Antenna Interface	1* Standard SMA-K antenna interface (outer screw inner hole)
	Sim Card Slot	2*Nano-SIM
	Standard	IEEE 802.11b/g/n, 2.4GHz, AP/STA/ bridge
		300Mbps,
Wi-Fi	Theoretical Rate	The actual rate of WIFI is subject to the interference factors of the field
		environment
	Antenna Interface	2* Standard SMA-K antenna interface (external thread and internal hole)
	МІМО	2×2
	Transmission Distance	The open area is 500m, and the actual transmission distance depends on the
		field environment
	Number Of Network Ports	1WAN+1WAN/LAN+3LAN
Ethernet	Network Port Specifications	RJ45 interface: 10/100 Mbps adaptive, in line with IEEE 802.3,
		with 1.5KV network isolation transformer protection
DTU	DTU Mode	TCP/UDP/Modbus TCP to RTU/MQTT/HTTPD/AWS/ALI
		Pass-Through/Modbus RTU
	Heartbeat Packet /	$\checkmark$
	Registration Packet	
	Baud Rate	1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200, 230400
	Data Bit	7, 8
	Stop Bit	1, 2
	Check Bi	NONE,ODD,EVEN
	Serial Port Type	1*RS485+1*RS232
	Antenna Interface	1 * SMA-K (external thread and internal hole)
CNEE	Antenna Specifications	Square antenna, frequency range 1575.42MHz,
GNSS		signal strength 3.5 DBI, standard size 3 meters
	Location Mode	GPS data can be selected and reported
Indicator Light	PWR	The power indicator light is on after power on
	WiFi	It lights up when WIFI is on
	NET	4G-Green
		3G-Orange
		2G-Red
	SIG	Strong signal-Green
		Medium signal-Orange

#### USR-G806p Specification

		Weak signal-Red
Power	Adapter	DC 12V/1A
	Power Supply Interface	2P power terminal with reverse polarity protection
	Power Supply Range	DC 9-48V
	Working Current	< 500mA@12V
Physical Characteristics	Hull	Sheet metal shell, dustproof grade IP30
	Size	110.0*85.0*30.0 (L*W*H)
	Way To Install	Guide installation, wall hanging installation, horizontal desk placement
	EMC	Level 3
	Working Temperature	-40°C~+75℃
	Storage Temperature	-40°C ~ +85°C (No condensation)
	Working Humidity	5%~95% (No condensation)
Other	Reload	Support restore factory
	TBD	Debugging interface
	Ground Protection	Grounding screws

## **Contact Us**

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