

# USR-G806w specification

## Better Wi-Fi industrial router



## Introduction

USR-G806w is the pro version of our all-time bestseller G806 that inherited its' best features, including industrial design, compact size, multiple connection interfaces. It delivers high performance for mission-critical cellular communication in rigorous environments.

Equipped with 4G LTE, Wi-Fi, and three Ethernet ports, this router offers unstoppable connection continuity with a backup through automatic WAN failover. The Wi-Fi is functional in: Access point, Station mode and repeater mode.

USR-G806w is an excellent fit in various IoT and M2M solutions that require easy setup, reliable network, and remote accessibility, such as service robot, inspection robot, unmanned vehicle networking, massage chair networking, AGV car and other industrial application scenarios.

## Features

### ■ Stable And Reliable

- Industrial design Metal shell, IP30 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.

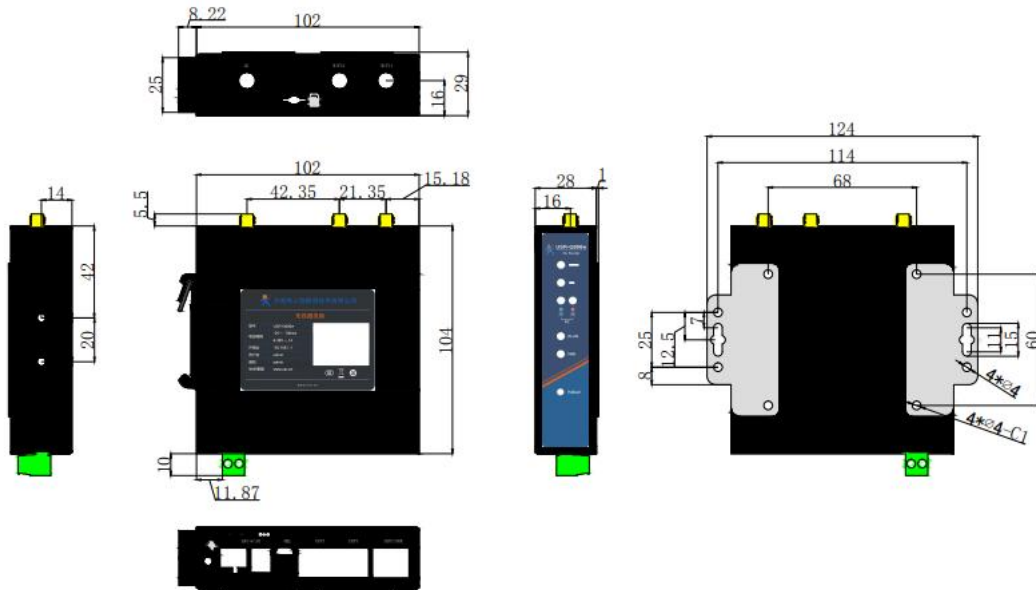
### ■ Uninterrupted network access

- Supports 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.
- Link backup: mutual backup of wired, 4G cellular and WiFi networks
- Equipped with strong Wi-Fi capability,802.11 a/b/g/n,2.4G Wi-Fi,2\*2 MIMO, up to 300Mbps,Support AP/STA/repeater mode
- 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.
- 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 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.
- Supports firewall, NAT,DMZ,black and white list of access control
- Support SNMP,VLAN

## Dimensions



- Unit: mm.
- Dimensions: 104\*102\*28.0mm(L\*W\*H).Power terminal, antenna connector are not included.
- Installation Method: 35mm DIN-rail mounting,Panel mounting.

## G806 series ordering guide

USR-G806 ordering guide			
model	USR-G806-<M>	USR-G806w-<M>	USR-G806s-<M>
Region <M>	-43: China/India -G: Global -A:North America -E: EMEA/South Africa/Thailand -AU: Latin/Australia/New Zealand -EAU:Europe/Australia/New Zealand	Global	-43: China/India -EAU:EMEA/Thailand
Wi-Fi	AP	AP/STA/Repeater	AP
Ethernet port	1WAN/LAN+1LAN	1WAN/LAN+2LAN	1WAN/LAN+1LAN
Serial port	--	---	RS485
Dimensions (mm)	100.0*94.0*29.0	104.0*102.0.28.0	90.0*84.0*25.0

# Specifications

USR-G806w hardware specification		
	Frequency	TDD-LTE:B38/40
		FDD-LTE: B1/3/7/8/20/28
	Antenna	1 x SMA-K
	SIM card	1 x (3 V & 1.8 V) Standard 4FF SIM
Ethernet	WAN	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
	LAN	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	PWR	red,always on after powered on
	WIFI	green,always solid on when WiFi is enabled and working properly
	4G mode indicator	Both leds is on after connected to 4G network
	SIG	Signal strength: 2 LED is solid on,strongest signal
Wi-Fi	Standards & Frequency	IEEE 802.11b/g/n, 2.4GHz, AP/STA/Repeater mode
	Data speed	300Mbps
	Antenna	2 x RP-SMA-K
	MIMO	2x2
	Transmission distance	500 meters by line of sight.Actual transmission distance depends on environment of the site.
	WiFi users	Up to 20 simultaneous connections
Power Supply	Adaptor	DC 12V/1A
	Connector	DC Power Jack Barrel Type Female 5.5*2.1mm Round socket or 2 PIN industrial terminal block,reverse polarity protection
	Input voltage	DC 9-36V

	Power consumption	Average 260mA/12V	
Physical Characteristics	Casing material	Metal shell,IP30	
	Dimensions	104.0*102.0*28.0 (L*W*H, antenna pedestal, terminal block and DIN Rail are not included )	
	Installation	Panel mounting, DIN-Rail mounting	
	EMC		Static IEC61000-4-2, level 3
			Pulsed Electric Field IEC61000-4-4, level 3
			Surge IEC61000-4-5, level 3
	Operating temperature	-20°C~+70°C	
	Storage temperature	-40°C ~ +125°C ( non-condensing )	
Operating humidity	5%~95% ( non-condensing )		
Others	Reload	Pinhole reset button	
	TBD	Debug interface (TTL Level)	
	Ground protection	Screw	
	Approvals	CE, WPC, RCM, ROHS, WEEE	
<b>USR-G806w Software Specifications</b>			
Network Connection	WAN protocol	PPP, PPPoE, DHCP client	
	LAN protocol	ARP, DHCP server, NAT, VLAN	
	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		
Device management	Configuration	Web	
	Remote management	SSH, AT command,SNMP,SMS	
	PUSR platform	Remote monitoring,remote upgrade,alarming,base station location,remote access to web pages of the router	
Security	Failover backup	WiFi WAN, Mobile, Wired options, each of which can be used as an automatic Failover	
	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	
		NTP client	

## Purchase and Support

### ■ For more information please visit our websites:

Official website: <https://pusr.com>

Official shop: <https://shop.usriot.com>

Technical support: <http://h.usriot.com/>