

# 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.

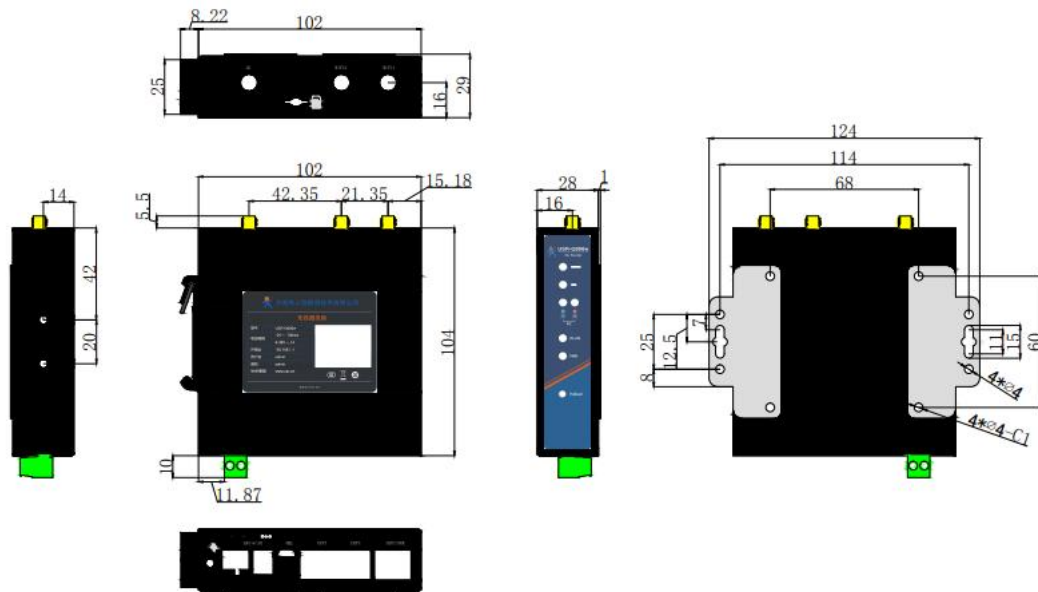
### ■ Uninterrupted network access

- Supports 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.
- 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	-43: China/India -E: EMEA/Thailand -AU: Latin/Australia/New Zealand	-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				
Cellular Interface	Frequency	-E TDD-LTE:B38/40/41 FDD-LTE: B1/3/7/8/20/28A WCDMA: B1/8 GSM/EDGE:B3/8	-AU TDD-LTE:B40 FDD-LTE: B1/2/3/5/7/8/28 WCDMA: B1/2/4/5/8 GSM/EDGE:B2/3/5/8	
	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		
	2/3/4G mode indicator	2G led is on after connected to 2G network 3G led is on after connected to 3G network 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		

USR-G806w Software Specifications		
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
	Others	NTP client Timing task

## 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/>