

Communication Expert of Industrial IoT

# **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.

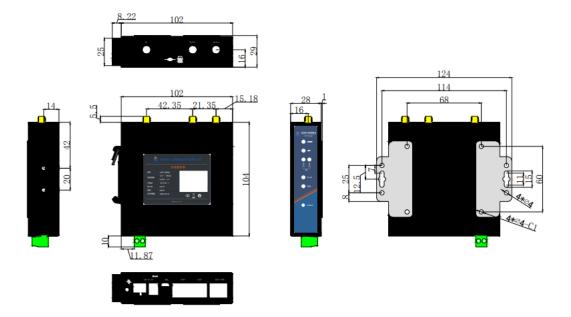
#### Uninterrupted network access

- 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></m>	USR-G806w- <m></m>	USR-G806s- <m></m>		
Region	-43: China/India	-G: Global	-43: China/India		
<m></m>	-G: Global	-43: China/India	-EAU:EMEA/Thailand		
	-A:North America	-E: EMEA/Thailand			
	-E: EMEA/South Africa/Thailand	-AU: Latin/Australia/New Zealand			
	-AU: Latin/Australia/New Zealand				
	-EAU:Europe/Australia/New				
	Zealand				
Wi-Fi	AP	AP/STA/Repeater	АР		
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						
		-Е	-AU	-G			
Cellular Interface	Frequency	TDD-LTE:B38/40/41	TDD-LTE:B40	TDD-LTE:B34/38/39/40/41			
		FDD-LTE: B1/3/7/8/20/28A	FDD-LTE:B1/2/3/5/7/8/28	FDD-LTE: B1/2/3/4/5/7/8/12/13/18/19/20/25/26/28/66			
		WCDMA: B1/8	WCDMA: B1/2/4/5/8	WCDMA: B1/2/4/5/6/8/19			
		GSM/EDGE:B3/8	GSM/EDGE:B2/3/5/8	GSM/EDGE:B2/3/5/8			
	Antenna	1 x SMA-K					
	SIM card	1 x (3 V & 1.8 V) Standard 4FF	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					
	PWR	red,always on after powered on					
	WIFI	green,always solid on when WiFi is enabled and working properly					
Indicators	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					
	Standards & Frequency	IEEE 802.11b/g/n, 2.4GHz,	AP/STA/Repeater mode				
	Data speed	300Mbps					
	Antenna	2 x RP-SMA-K					
Wi-Fi	MIMO	2×2					
	Transmission distance	500 meters by line of sight.Actual transmission distance depends on environment of the site.					
	WiFi users	Up to 20 simultaneous connections					
	Adaptor	DC 12V/1A					
Power Supply	Connector	DC Power Jack Barrel Type Fer protection	nale 5.5*2.1mm Round socket	: or 2 PIN industrial terminal block,reverse polarity			
	Input voltage	DC 9-36V					

#### USR-G806w datasheet

consumption   Casing material   Dimensions   Installation	Average 260mA/12V     Metal shell,IP30     104.0*102.0*28.0 (L*W*H, antenna pedestal, terminal block and DIN Rail are not included )     Panel mounting, DIN-Rail mounting     Static IEC61000-4-2, level 3     Pulsed Electric Field IEC61000-4-4, level 3     Surge IEC61000-4-5, level 3	
material Dimensions Installation	104.0*102.0*28.0 (L*W*H, antenna pedestal, terminal block and DIN Rail are not included ) Panel mounting, DIN-Rail mounting Static IEC61000-4-2, level 3 Pulsed Electric Field IEC61000-4-4, level 3	
Installation	Panel mounting, DIN-Rail mounting Static IEC61000-4-2, level 3 Pulsed Electric Field IEC61000-4-4, level 3	
Physical	Static IEC61000-4-2, level 3 Pulsed Electric Field IEC61000-4-4, level 3	
Physical	Pulsed Electric Field IEC61000-4-4, level 3	
Physical FMC		
Characteristics	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)	
Reload	Pinhole reset button	
TBD	Debug interface (TTL Level)	
Others Ground protection	Screw	
Approvals	CE, WPC, RCM, ROHS, WEEE	
	USR-G806w Software Specifications	
WAN protocol	PPP, PPPoE, DHCP client	
LAN protocol	ARP, DHCP server, NAT, VLAN	
	Auto APN/VPDN, private network	
4G network access	Access authentication: CHAP/PAP	
Connection	Open system,WPA/WPA2 PSK	
WLAN security	TKIP/AES encryption	
IP routing	Static routing	
Network diagnosis	Ping,route trace,DNS	
Configuration	Web	
Device 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	
Failover backup	WiFi WAN, Mobile, Wired options, each of which can be used as an automatic Failover	
Security 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
Others	Timing task

## **Purchase and Support**

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

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

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

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