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Specification

USR-G810

5G Industrial cellular Router

Build a Smarter IOT world, Your Trustworthy Partner

USR-G810 5G industrial wireless router is designed to be a high speed,wide coverage,and low latency router which offers multiple internet access with 5G/4G/3G,Ethernet,and dual-band Wi-Fi,and provides users with strong, reliable performance and diverse networking solutions.

The product adopts high-performance dual-core processor, working frequency up to 880MHz, equipped with 2.4GHz, 5.8GHz dual-band Wi-Fi, supports Gigabit LAN/WAN port, based on various hardware interfaces and powerful software functions, users can quickly build their own applications .

USR-G810 is suitable for various applications in harsh environments such as Internet of Vehicles, smart medical, unmanned vehicles, smart cities and so on.
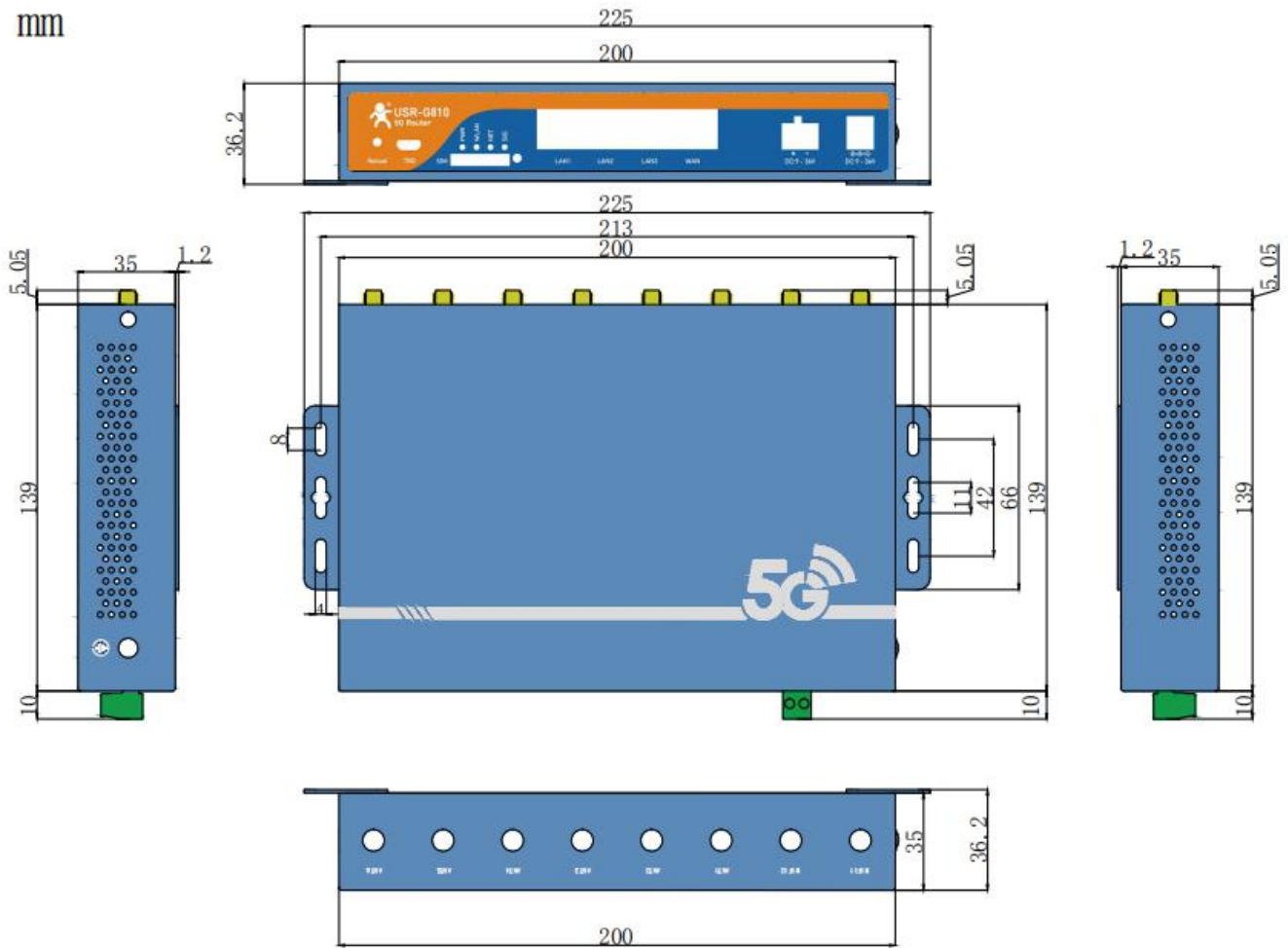
Features

Stable and reliable

- Industrial design, metal housing,Protection Rating IP30
- Wide voltage DC 9-36V input, with power reverse protection
- Multiple protections against electronic static discharge, surges, and Electrical fast transient burst
- Embedded with hardware watchdog and fault self-detection and self-repair mechanism to ensure system stability

- Provide a 5G network with high speed, low latency and high stability
- Supports NSA 和 SA modes,Backward compatible with 4G/3G network standard
- 4 Gigabit Ethernet ports to ensure high-speed data transmission
- The scientific layout of 6 high-gain antennas effectively reduces co-frequency interference and stabilizes sending and receiving data
- Support automatic network inspection, 5G/4G/3G standard switching, support APN/VPDN dedicated network card
- Auto-failover between　Ethernet, Wi-Fi and 4G/5G internet
- Supports 2.4GHz and 5.8GHz dual band Wi-Fi
- Support multiple VPN protocols such as PPTP、L2TP、IPSec、OpenVPN、GRE and Cryptography

Powerful

- Support multiple WAN connection methods, including static IP, DHCP, PPPoE, 3G/4G/5G
- Support DDNS,NAT,static routing function
- Support filtering,port mapping,access control
- Support ssh、telnet、Web management
- Support configuration parameter import/export to improve configuration efficiency in mass applications
- Support remote firmware upgrade, remote equipment monitoring, easy to realize remote operation and maintenance of equipment
- Support link detection function, provide anti-drop mechanism to ensure long-term online

Dimensions

- Sheet metal housing，fixed holes on both sides，compatible with DIN Rail mounting
- Dimensions：200.0*140.0*35.0mm（L*W*H，Excluding installation parts, power terminals and antenna base）
- Fixed holes position：213.0*42.0mm(L*W*H)

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Hardware Parameters

Cellular	Module	Industrial grade cellular module
	Frequency bands	5G Sub-6: n1, n3, n5, n8, n20, n28, n38, n41, n77, n78, n79 LTE FDD:B1, B3, B5, B7, B8, B18, B19, B20, B28, B32 LTE TDD：B38, B40, B41, B42, B48 WCDMA：B1, B3, B5, B8, B19
	Bandwidth	5G NR:up to 900Mbps uplink,up to 2.1Gbps downlink LTE:up to 150Mbps uplink,up to 1Gbps downlink HSPA+:up to 5.76Mbp uplink,up to 42Mbps uplink
	TX PWR	Class 3 (23dBm±1dB)
Wi-Fi	Frequency bands	IEEE802.11b/g/n,2.4GHz,AP mode IEEE802.11ac,5.8GHz,AP mode
	Bandwidth	2.4G:up to 300Mbps,5.8G:up to 867Mbps
	AUTH type	WPA-PSK,WPA2-PSK,MPA3-PSK
	Encryption algorithm	TKIP,AES
	Transmission distance	Outdoor:up to 200 meters by line of sight without obstruction Indoor: up to 40 meters Actual transmission distance depends on environment of the site.
Interfaces	WAN	1 10/100/1000M Ethernet port,auto MDI/MDIX,1.5KV network isolation transformer protection
	LAN	3 10/100/1000M Ethernet port,auto MDI/MDIX,1.5KV network isolation transformer protection
	Indicators	PWR,WLAN,NET,SIG
	Antennae	Cellular:6xSMA Female (Outer screw inner hole) Wi-Fi:2xSMA Female(Outer screw inner hole)
	SIM card	6PIN drawer-type SIM card slot,3V/1.8V 2FF mini SIM card
	Power supply	DC Power Jack Barrel Type Female 5.5*2.1mm Round socket + 2 PIN industrial terminal block,anti-reverse connection
	Reload	Pinhole reset button,Long press for more than 5s to release to restore factory settings
	TBD USB	Debug and flash
Power supply	Power adaptor	DC 12V/2A
	Voltage range	DC 9-36V
	Current	Average 524mA,Peak 637mA/12V
Mechanical	Housing	Metal,IP30
	dimensions	200.0*140.0*35.0 (L*W*H)
EMC	ESD	IEC 61000-4-2 Level 3
	Surge	IEC 61000-4-5 Level 3
	EFT	IEC 61000-4-4 Level 3
Ambient Environment	Operating Temperature	-20℃～+70℃
	Storage Temperature	-40℃～+125℃
	Humidity	5%～95%RH（non-condensing）

Software Parameters		
Network Connection	Ethernet port	WAN:DHCP,PPPoE,static IP LAN:DHCP,static IP
	Network access	APN,VPDN,private network Support network priority setting
	Wi-Fi	IEEE 802.11b/g/n/ac
	Static routing	Support routing table addition and viewing, easy implementation of path selection, sub-net interconnection and other applications
	IP Application	Ping,route trace,DNS,DDNS
Device management	Configuration	Telnet, web, ssh and AT command Support configuration parameter import/export to improve configuration efficiency in mass applications Local system log, remote log, and serial export of log. Power down saving of important logs, which is convenient for technicians to quickly locate application problems
	Remote management	Free cloud platform device manager enables you to monitor and configure thousands of routers with minimum effort Support real-time view of network status, online and offline reminder, abnormal situation alert pushing
Security	Link Detection	Sends heartbeat packets to detect,auto redials when disconnected
	Embedded Watchdog	Device runs self-detection,auto recovers from malfunctions
	Network Security	Multicast filter/Ping probe packet,Access Control List (ACL), port mapping,virtual IP mapping,IP-MAC binding
	Data Security	Supports PPTP,L2TP,GRE,IPSEC VPN (IKEv1,IKEv2),OPENVPN protocols Supports CA digital certificate
Others	Rich protocols	Built-in multiple common protocols, support industry protocol, private protocol customization

Purchase & After Sale

Official website: http://www.pusr.com/

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

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