Industrial GPS 4G LTE Router

USR-G806s-G

Introduction

The USR-G806s is an IoT cellular router that integrates 4G LTE, Wi-Fi, GPS and VPN technologies to provide an easy, reliable, secure Internet connectivity and high-speed data access for equipment networking. With technologies such as 4G wireless wide area network ,Dual Ethernet ports (LAN + WAN),Wi-Fi wireless local area network it provides uninterrupted multiple network access capabilities.

The G806s can offer a choice of (3-wire) RS485/232. This means that RS485/232 devices,such as electricity meters, programmable logic controllers including Modbus RTU equipment can connect to the internet directly through the router. With the GPS function, users can monitor their asset remotely, and can monitor the the trajectory of the vehicle.

The product adopts high-performance CPU, working frequency up to 580MHz, based on a variety of hardware interfaces and powerful software functions, users can quickly build their own application network. It is suitable for large-scale distributed industrial applications, such as smart express cabinets, charging piles, CCTV, ATM machines, ticket machines, traffic management,vending machines, medical device networking, tower monitoring,lifts monitoring, digital signage, electricity, water conservancy, environmental protection, etc.

Product Features

Stable And Reliable

- Metal shell, IP30 protection.Ethernet ports support 1.5KV isolation transformer 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.
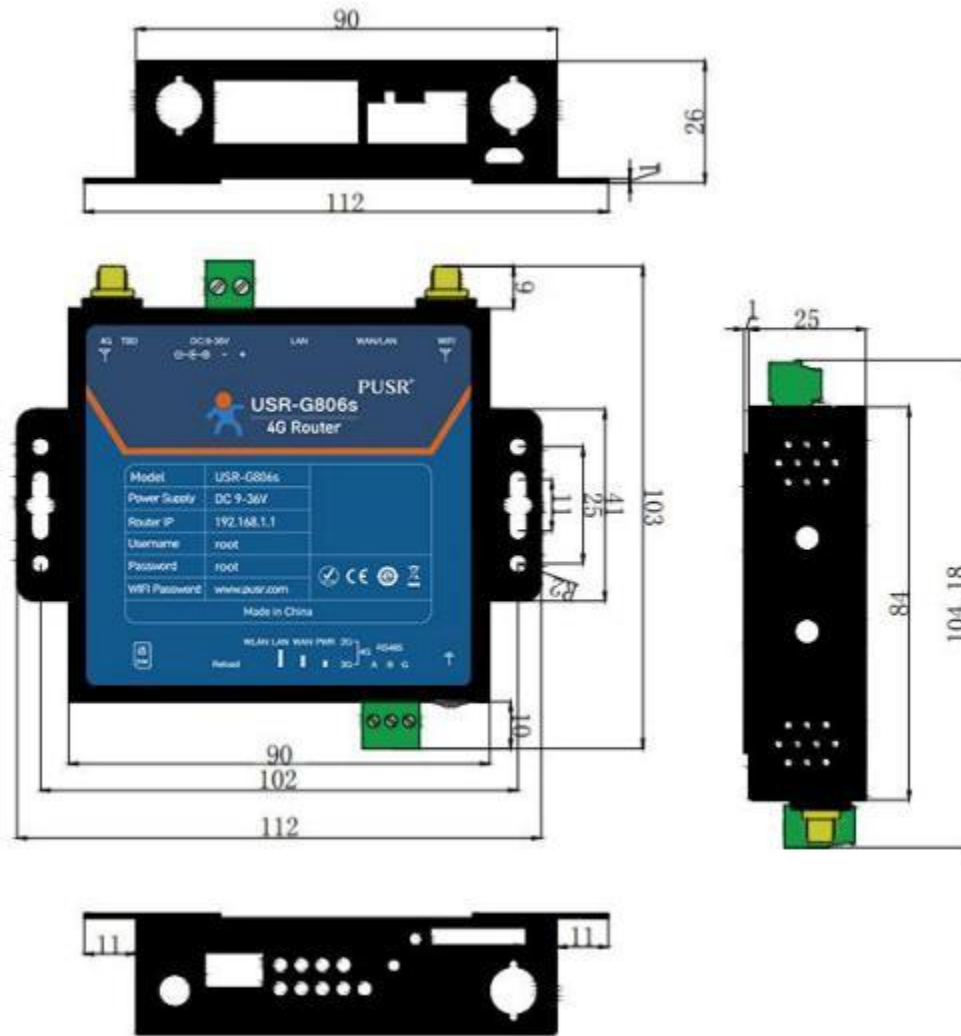
Uninterrupted network access

- Supports 2G/3G/4G network all over the world ,supports APN/VPDN sim card.
- Fail-over between 4G and WAN, ensures automatic switch to alternative backup connection,effectively ensuring uninterrupted data transmission.
- 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 GPS positioning, can be combined with PUSR cloud to achieve running track monitoring, and also support reporting positioning data to private server in RCM or GGA format.
- Supports remote monitoring, upgrade and parameter configuration, remote access to the built-in web pages.
- Supports email alarm,SMS alarm,abnormal alarm push in time.
- Dual Ethernet ports, WAN/LAN.
- Multiple VPN protocols.
- 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 WLAN,scaling more devices access.
- 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.
- Provides wireless data communications between field serial devices and the central control system.

Dimensions

Unit: mm

USR-G806s Dimensions

Specifications

USR-G806s-G Specification		
Item	Parameters	Value
Power Supply	Power Input	9~36V DC
	Working Current	Average 270mA/12V
	Power Connector	DC Power Jack Barrel Type Female 5.5*2.1mm Round socket or 2 PIN 5.08mm industrial terminal block,reverse polarity protection
Cellular Interface	Frequency	TDD-LTE: B34/38/39/40/41
		FDD-LTE:B1/2/3/4/5/7/8/12/13/18/19/20/25/26/28/66
		WCDMA: B1/2/4/5/6/8/19
		GPRS/EDGE: B2/3/5/8
	Max. Data Rates	TDD-LTE: 130 Mbps (DL)/50 Mbps (UL)
		FDD-LTE: 150 Mbps (DL)/50 Mbps (UL)
		WCDMA: 384 kbps (DL)/384 kbps(UL)
		GPRS: 107 kbps (DL)/85.6 kbps (UL)
		EDGE: 296 kbps (DL)/236.8 kbps (UL)

	Antenna	1 x SMA-K
	SIM card	1 x 2FF SIM
Ethernet Ports	WAN	1 x WAN port (can be configured to LAN) 10/100 Mbps, supports auto MDI/MDIX,1.5KV network isolation transformer protection
	LAN	1 x LAN port, 10/100 Mbps, supports auto MDI/MDIX,1.5KV network isolation transformer protection
WiFi	Standards & Frequency	IEEE 802.11b/g/n,2.4GHz, AP mode
	Data speed	IEEE 802.11b/g,maximum 54Mbps.IEEE 802.11n,maximum 150Mbps
	Antenna	1 x SMA-K
	Transmission distance	80 meters by line of sight.Actual transmission distance depends on environment of the site.
GPS Interface	Antenna Interface	1 * SMA-K
	Antenna Type	Active antenna, frequency range 1575.42Mhz
	Accuracy	The theoretical value for positioning accuracy is 2.5 meters, this accuracy is influenced by factors such as the number of available satellites.
Serial Interface	RS485	3 PIN 3.81mm industrial terminal block.
	Baud rate	1200/2400/4800/9600/19200/38400/57600/115200/230400
	Data bits	8
	Stop bits	1, 2
	Parity	NONE,ODD,EVEN
Other Interface	Reload	Reset to factory settings
	TBD	Debug interface (TTL Level)
	Indicators	PWR, WAN. LAN, WLAN, GNSS, Signal, 2G, 3G, 4G
Physical Characteristics	Housing	Metal shell,IP30
	Dimensions	112.0*84.0*25.0 mm(L*W*H)
	Installation method	Panel mounting, DIN-Rail mounting
	EMC	IEC 61000-4-2(ESD): Level 3 IEC 61000-4-4(EFT): Level 3 IEC 61000-4-5(Surge): Level 3
	Operating temperature	-20℃～+70℃
	Storage temperature	-40℃～+125℃
	Operating humidity	5%～95%RH (non-condensing)
Network Connection	WAN protocol	PPP, PPPoE, DHCP client
	LAN protocol	ARP, DHCP server, NAT
	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
Serial modem	Work mode	NET,HTTPD
	Sockets	4 sockets,4 centers ,TCPS(SOCKA)/TCPC/UDPS/UDPC
	Modbus RTU toTCP	Support
Device management	Configuration	Web
	Remote management	Telnet, SSH, AT command,SNMP

	PUSR platform	Remote monitoring, remote upgrade, alarming, base station location, remote access to web pages of the router
Security	Failover backup	Failover between 4G and WAN, ensures automatic switch to alternative backup connection
	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 & 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/**

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