

Technical Specification for SR800 Industrial 5G Router



VERSION NUMBER: **V2.3**

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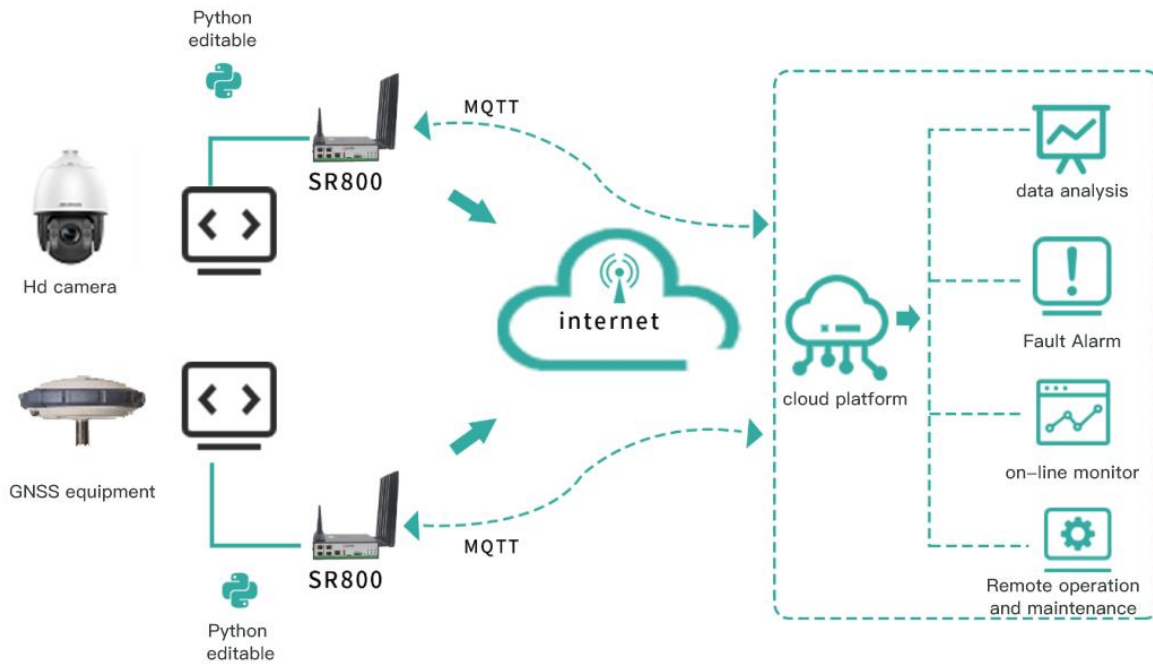
Product Overview

The SR800 series products are IoT wireless router which is integrate 4G/5G networks, virtual private networks, and other technologies. With dual-network backup of 4G/5G wireless wide area networks and Wi-Fi wireless local area networks, this device provides uninterrupted access to various networks. With its comprehensive security and wireless service features, it offers users a high-speed and stable data transmission channel.

Product Features

- Supports 5G high-speed network and Redcap network
- Supports multiple DNNs
- Supports WLAN
- Supports 5 Ethernet ports
- Supports rail and desktop installation
- Supports dual-operator network backup (dual SIM cards)
- Supports dual power redundancy backup
- Supports efficient completion of large-scale device network deployment
- Industrialized design, capable of withstanding challenging conditions
- Supports Linux OpenWrt system, facilitating user secondary development, and providing comprehensive secondary development guidelines
- Supports various VPN functions: PPTP, L2TP, IPSEC, OPENVPN, GRE, GRE-TAP, Vxlan, etc
- Supports SNMP and StarLink STAR DEVICE MANAGER StarCloud platform, enabling efficient remote centralized network management

Topology Diagram



Technical Parameters

Hardware Performance

Memory	512MB
FLASH	4GB EMMC
WIFI	Supports 2.4G/5.8G dual-band, theoretical maximum speed of 866.7Mbps. Optional WIFI 6, theoretical maximum speed of 1774Mbps
Network Support	Industrial-grade 5G module
System Time	Time synchronization using NTP technology, with built-in RTC

Interfaces

WAN port	1 WAN port
LAN port	4 ports (10M/100M/1000M adaptive MDI/MDIX port)
SIM card interface	2 slots (drawer-type card slot, supporting 1.8V/3V SIM/UIM cards)
USB interface	1*USB2.0
Reset	1 reset button
Antenna interface	4 ports 4G/5G antenna, 50-ohm impedance, SMA female head interface 2 ports 2.4G/5.8G antenna, 50-ohm impedance, SMA interface), optional 4 ports

Power terminal	1 terminal (2-pin 3.81mm pitch connector), 1 DC train head
Console port	1 port (5-pin 3.5mm pitch connector, 1 RS232/RS485)
Indicators	9 (1 PWR indicator, 1 SYS indicator, 3 signal strength indicators, sim1, sim2, 1 WiFi indicator, 1 NET indicator)

Power Characteristics

Power	External power adapter (12V 2A)
Operating voltage	Wide power input DC 9~36V
Standby power consumption	300~500mA@12V DC
Operating power consumption	500~700mA@12V DC

Operating Conditions

Operating temperature	-35~+75°C (-31~+167°F)
Storage temperature	-40~+85°C (-40~+185°F)
Operating humidity	5%~95% (non-condensing)
Device ventilation	Natural heat dissipation, no noise

Physical Characteristics

Enclosure	Full metal enclosure
Dimensions	Length*Width*Height:126*44*166mm (excluding antenna and installation accessories)
Installation method	Desktop placement, rail installation, wall mounting
Weight	Net weight: 0.67KG (excluding antenna and installation accessories) Gross weight: 0.95KG (with accessories and packaging box)

Device Safety and Reliability

Safety and reliability	Reverse polarity protection, overvoltage protection, overcurrent protection; Ethernet interface built-in 1.5KV electromagnetic isolation protection; RS232/RS485 interface built-in 15KV ESD protection; SIM/UIM card interface built-in 15KV ESD protection
Protection level	IP30
Certification	Compliant with CCC, RoHS
MTBF	≥100,000 hours

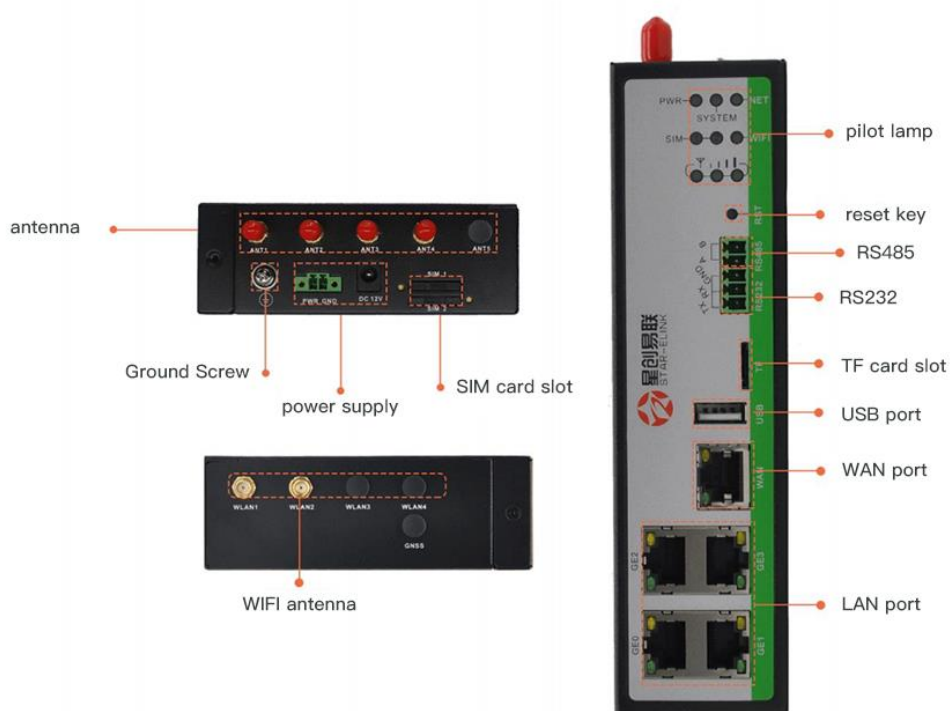
Software Features

Network Access	Supports APN/VPDN/slice network
Access authentication	Supports CHAP/PAP authentication
Network mode	5G Sub-6 SA/NSA/LTE/WCDMA
LAN protocol	Supports ARP, Ethernet
WAN protocol	Supports static IP, DHCP, PPPoE, PPP
IP Applications	Supports Ping, Trace, DHCP Server, DHCP Relay, DHCP Client, DNS relay, DDNS, Telnet
IP routing	Supports routing
NAT function	Supports network address translation
Industrial protocols	Supports environmental protection 212 protocol, supports MQTT, MUDBUS, and other industrial protocols

Positioning function	Supports GPS/Beidou positioning
Network Security	
Firewall	Full state packet inspection (SPI), prevention of denial of service (Dos) attacks, filtering of multicast Ping packets, access control lists (ACLs), content URL filtering, port mapping, virtual IP mapping, IP-MAC binding
Data security	IPsec VPN/L2TP/PPTP/GRE/OPEN VPN/CA certificate
Reliability	
Backup function	Supports wired, 5G, and Wi-Fi triple backup
Link online monitoring	Sends heartbeat packets for detection and automatically reconnects when disconnected
Embedded watchdog	Equipment runs self-checking technology, and equipment automatically repairs faults
WLAN	
Protocol standard	IEEE 802.11b/g/n/ac/wifi6 ax(optional)
Speed	Up to 1774Mbps
Security features	Open system, shared key, WPA/WPA2 authentication, WEP/TKIP/AES encryption
Operating mode	AP, Client operating mode
Transmission distance	100m (actual transmission distance depends on the environment)
Smart Features	
Integrated DTU function	Supports TCP, UDP transparent transmission mode, TCP Server mode, supports Modbus RTU to Modbus TCP bridge, supports DCUDP, DCTCP mode
Network Management	
QoS management	Supports bandwidth limitation, IP rate limiting
Configuration method	Supports telnet, web, ssh, and console configuration methods
Upgrade method	Supports web upgrade, supports FOTA
Log function	Supports local system logs, remote logs, serial port output logs
Network management function	Supports StarLink STAR DEVICE MANAGER StarCloud platform, batch management
Simple network management function	Supports SNMP v1/v2/v3, supports SNMP TRAP function
Traffic management	Supports traffic threshold setting, supports traffic statistics and traffic alert functions
Maintenance Tools	Ping, route tracking
Status Query	System status, modem status, network connection status, route status

Product Interfaces

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Product Dimensions

单位:mm

unit:mm

