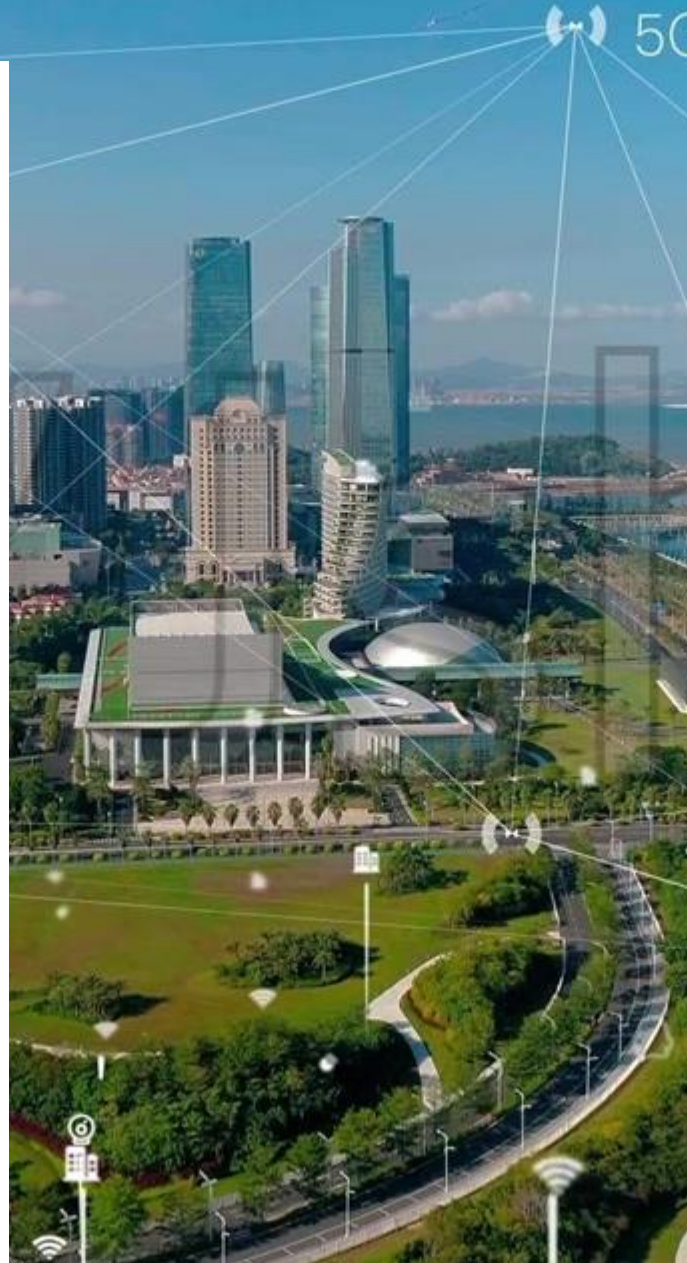




Technical Specification for SR800-01 (Optical 5G Router)



VERSION NUMBER: **V2.2**

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Product Overview

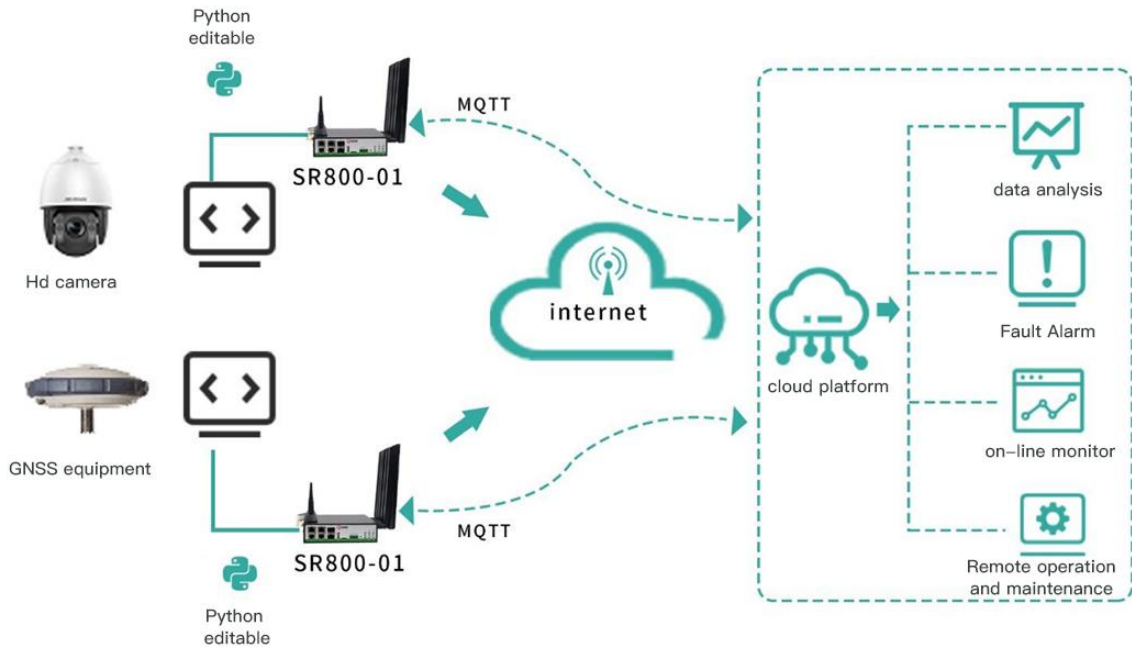
The SR800 series products are IoT wireless router which integrating 4G/5G networks, optical fibers, and virtual private networks. With technologies including 4G/5G wireless wide area network redundancy, optical fibers, and Wi-Fi wireless local area network, this device provides uninterrupted access to multiple networks, offering users high-speed and stable data transmission channels with comprehensive security and wireless services.

Product Features

- Supports 5G high-speed network and Redcap network
- Supports multiple DNN (Deep Neural Network)
- Supports WLAN (Wireless Local Area Network)
- Supports 4 Ethernet ports
- Supports 2 SFP ports
- Supports hand-in-hand ring network and STP (Spanning Tree Protocol)
- Supports rail and desktop installation
- Supports dual power redundancy backup
- Supports wired, optical fiber, and wireless backup
- Supports efficient deployment of large-scale device networks
- Fully industrialized design, capable of withstanding challenging conditions
- Supports Linux OpenWrt system, facilitating user secondary development, and providing comprehensive secondary development guidelines
- Supports various VPN functionalities: PPTP, L2TP, IPSEC, OPENVPN, GRE, GRE-TAP, Vxlan, etc

- Supports SNMP (Simple Network Management Protocol) and Star Cloud Platform for efficient remote centralized network management

Topology Diagram



Technical Parameters

| Hardware Performance | |
|----------------------|---|
| Memory | 512MB |
| FLASH | 4GB EMMC |
| WIFI | Supports 2.4G/5.8G dual-band, with a theoretical maximum rate of 866.7Mbps. Optional WIFI6, with a theoretical maximum rate of 1774Mbps |
| Network support | Industrial-grade 5G module |
| System time | Time synchronization using NTP technology, with built-in RTC |
| Interfaces | |
| Ethernet ports | 4 (10M/100M/1000M adaptive MDI/MDIX port), LAN/WAN configurable |
| Optical ports | 2 SFP |
| SIM Card Interfaces | 2 (drawer-type card slots, supporting 1.8V/3V SIM/UIM cards) |
| USB interface | 1*USB2.0 |
| Reset | 1 (reset button). |

| | |
|-------------------|---|
| Antenna interface | 4 (4G/5G antennas, impedance 50 ohms, SMA male interfaces) |
| Power terminals | 2 (2.4G/5.8 antennas, impedance 50 ohms, SMA interface), optional 4 |
| ConsolePort | 1 (2-pin 3.81mm pitch connector), 1 DC power jack |
| Indicators | 1 (5-pin 3.5mm pitch connector, 1 RS232/RS485) |
| | 9 (1 PWR, 1 SYS, 3 signal strength, sim1, sim2, 1 WiFi, 1 NET) |

Power Characteristics

| | |
|-----------------------------|---------------------------------|
| power supply | 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, noise-free |

Physical Characteristics

| | |
|----------------------|---|
| Chassis | Full metal chassis |
| Dimensions | Length*Width*Height: 126*44*166mm (excluding antenna mounting parts) |
| Installation Methods | Desktop placement, rail installation, wall-mounted |
| Weight | Net weight: 0.67KG (excluding antennas and mounting parts) Gross weight: 0.95KG (with accessories and packaging box) |

Device Security and Reliability

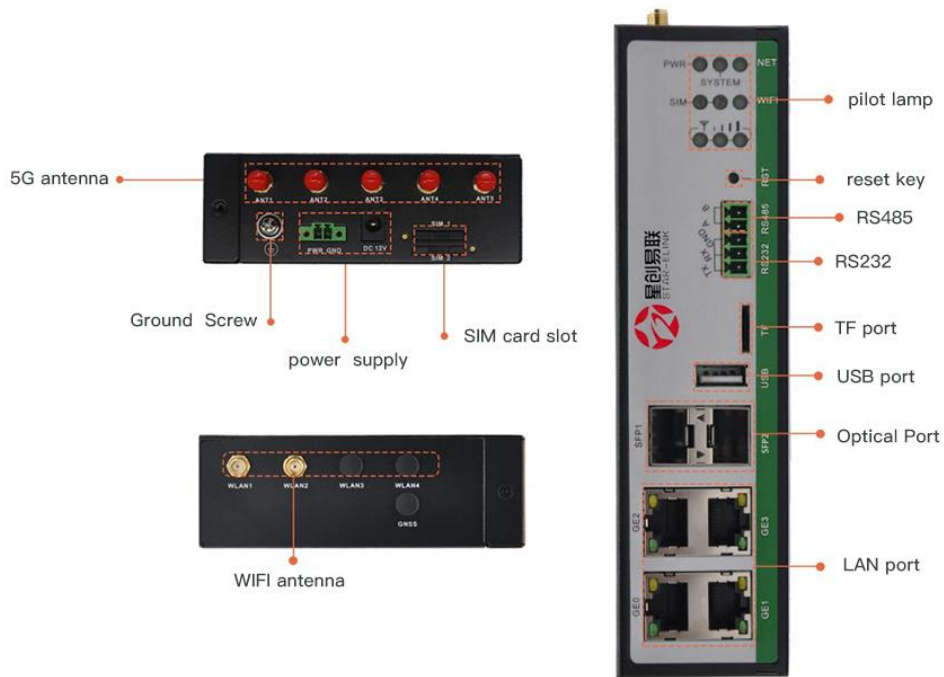
| | |
|--------------------------|--|
| Security and Reliability | Reverse polarity protection, overvoltage protection, overcurrent protection; Ethernet interface built-in 1.5KV electromagnetic isolation protection; RS232/RS485 interface built-in 15KV ESD protection; SIM/UIM card interface built-in 15KV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

Software Features

| | |
|-----------------------|---|
| Network access | Supports APN/VPDN/slice network |
| Access authentication | Supports CHAP/PAP authentication |
| Network modes | 5G Sub-6 SA/NSA/LTE/WCDMA |
| LAN protocols | Support ARP, Ethernet |
| WAN protocols | 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 | Support environmental protection 212 protocol, support MQTT, MUDBUS and other industrial protocols |
| Network Security | |
| Firewall | Full state packet inspection (SPI), prevention of denial of service (DoS) attacks, filtering multicast Ping packets, access control lists (ACL), content URL filtering, port mapping, virtual IP mapping, IP-MAC binding |
| Data Security | IPsec VPN/L2TP/PPTP/GRE/OpenVPN/CA certificate |
| Reliability | |
| Backup function | Supports wired, 5G, optical fiber, and WIFI backup |
| Link online monitoring | Sends heartbeat packets for detection, automatically reconnects after disconnection |
| Embedded Watchdog | Device self-checking technology, device fault self-repair |
| WLAN | |
| Protocol Standards | IEEE 802.11b/g/n/ac/wifi6 ax (optional). |
| Rate | Up to 1774Mbps |
| Security features | Open system, shared key, WPA/WPA2 authentication, WEP/TKIP/AES encryption |
| Operating modes | AP, Client operating modes |
| Transmission distance | 100m (actual transmission distance depends on the environment) |
| Intelligence | |
| 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 speed limit |
| Configuration Methods | Supports telnet, web, ssh, and console configuration methods |
| Upgrade method | Supports web upgrade, supports FOTA (Firmware Over The Air) |
| Logging Function | Supports local system logs, remote logs, serial port output logs |
| Network Management Function | Supports STAR Device Manager platform batch management |
| Simple network management function | Supports SNMP v1/v2/v3 supports SNMP TRAP function |
| Traffic management | It supports the setting of flow thresholds, flow statistics and flow alarms |
| Maintenance tools | Ping, route tracing |
| Status query | System status, modem status, network connection status, route status |

Product Interfaces



Product Dimensions

单位:mm
unit:mm

