

Technical Specification for SR500 4G Router (2 LAN)



VERSION:V3.0

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Product Overview

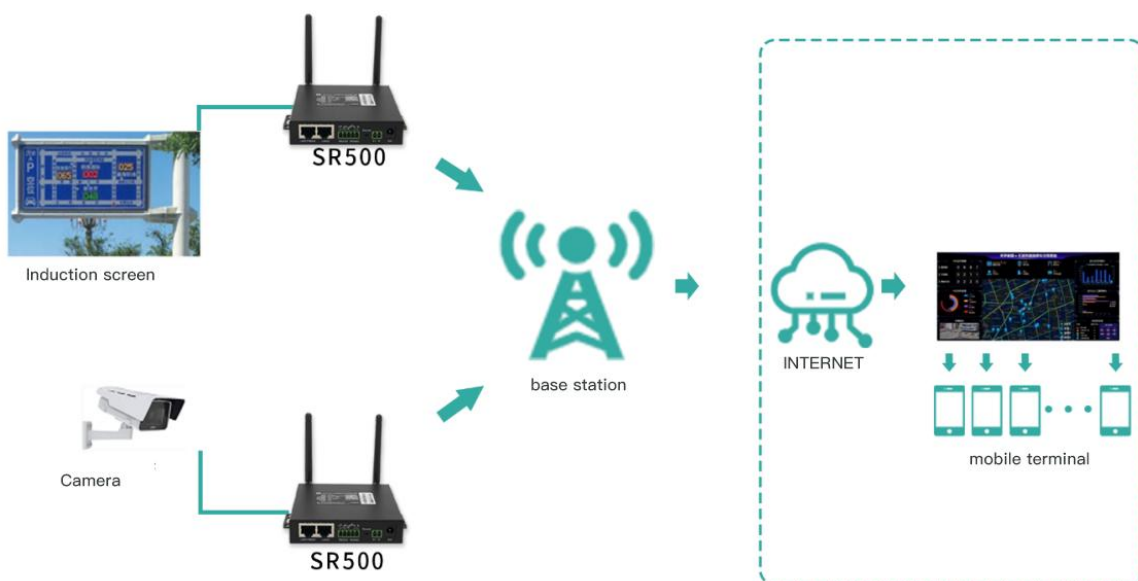
The StarRouter500 LTE Router (SR500) series is an IoT wireless router that integrates 4G networking, Virtual Private Network (VPN), and other cutting-edge technologies into a single device. By leveraging 4G Wireless Wide Area Network (WWAN) and Wi-Fi Wireless Local Area Network (WLAN), it delivers uninterrupted multi-network connectivity, ensuring high-speed, stable data transmission for users.

Product Features

- Supports 4G LTE network with optional Power 1.8 GHz dedicated network
- Supports DIN rail or desktop installation
- Supports GPS/Beidou positioning (optional)
- Supports WLAN(optional)
- Supports Failover between wired and wireless networks
- Supports Dynamic routing: OSPF and RIP
- Supports Policy-based routing with traffic diversion capabilities
- Supports Device status query and reporting for real-time monitoring
- Supports Multiple VLANs (tagged/untagged modes)
- Supports Linux OS for secondary development, with comprehensive development guides provided
- SNMP support and integration with StarCloud Platform (STAR DEVICE MANAGER)
- Multi-VPN protocols: PPTP, L2TP, IPSEC, OpenVPN, GRE, GRE-TAP, VXLAN



Topology Diagram



Technical Parameter

Hardware Performance

Memory	64MB
FLASH	16MB (expandable to 32MB)
WIFI (Optional)	2.4G supports 802.11b/g/n, maximum rate 150Mbps
Network Support	Industrial-grade 4G module, supports seven-mode full network
System Time	NTP technology for time synchronization, with built-in RTC

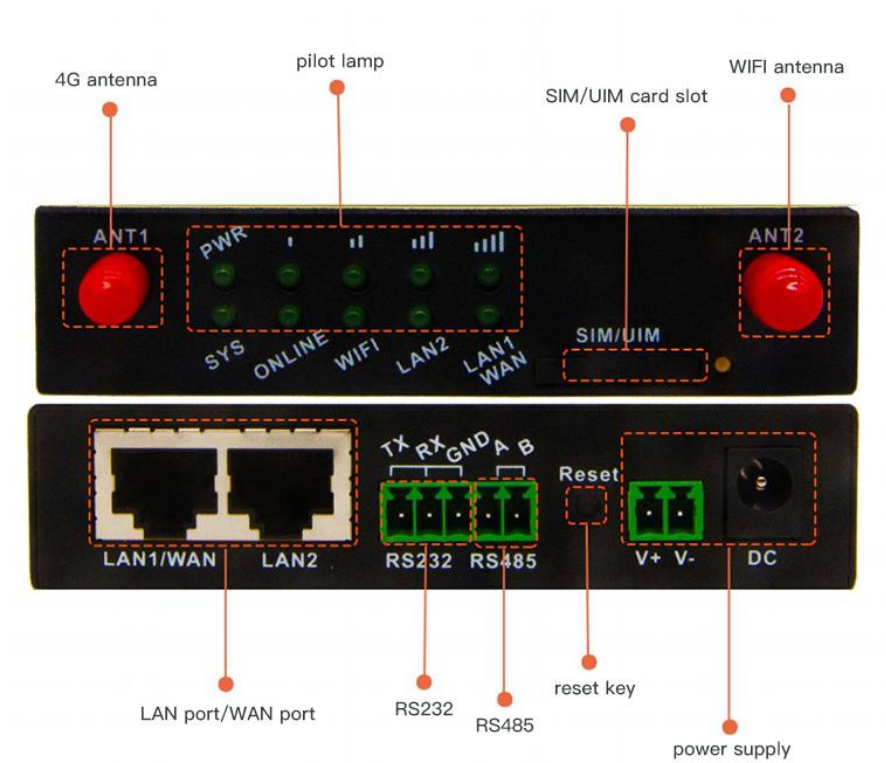
Interfaces

WAN Port	1 Software-Configurable LAN/WAN Multipurpose Port (10/100Mbps)
LAN Port	1 Auto-MDI/MDIX Ethernet Port (10/100Mbps)
SIM Card Interface	1 (Drawer type card slot, supports 1.8V/3V SIM/UIM cards)
Reset	1 (Reset button)
Antenna Interface	1 main 4G antenna interface with 50Ω impedance and SMA female chassis mount connector 1 multiplexed antenna interface (optional), default-configured for Wi-Fi antenna use (50Ω impedance, SMA chassis mount). It can be switched to a 4G diversity antenna for optional 4G signal enhancement
DC Power	1 (DC power socket 2.1mm inner core)
Power Terminal	1 (2-pin 3.81mm spacing connector)

Serial Port	1 x RS-232 port 1 x RS-485 port 5-pin terminal block with 3.5mm pitch spacing
Indicators	8 power indicators and status indicators (Power, System, LAN1, LAN2, SIM, Online, WIFI, 3G/4G)
Power Characteristics	
Power	External power adapter (12V 1A)
Operating Voltage	Wide power input DC 5-36V (expandable to 5-60V)
Standby Power Consumption	80~100mA@12V DC
Operating Power Consumption	150~250mA@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	
Casing Material	Metal housing
Dimensions	Length * width * height 100 * 100 * 23mm (excluding antenna and installation components)
Installation Methods	Desktop, DIN rail, wall-mounted
Weight	Net weight: 0.32KG (excluding antenna and installation components) Gross weight: 0.65KG (with accessories and packaging box)
Device Safety and Reliability	
Safety and Reliability	Power reverse 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	Complies with CCC, Rohs
MTBF	≥100,000 hours
Software Features	
Network Access	Supports APN VPDN
Access Authentication	Supports CHAP/PAP authentication
Network Modes	GSM/GPRS/EDGE,LIMITS/HSPA+/EVDO/TD-SCDMA/TD-LTE/FDD LTE
LAN Protocol	Support 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 static routing, dynamic routing protocols (OSPF, RIP), and policy-based routing
NAT Functionality	Supports network address translation

Network Security		
Firewall	Full-state packet inspection (SPI), prevent denial of service (DoS) attacks, filter multicast Ping packets, access control lists, URL filtering, port mapping, virtual IP mapping, IP-MAC binding	
Data Security	IPsec VPN/L2TP/PPTP/GRE /OPEN VPN	
Reliability		
Backup Functionality	Supports link backup(failover)	
Online Link Detection	Sends heartbeat packets for detection and automatically reconnects when disconnected	
Built-in Watchdog	Device self-checking technology, device fault self-repair	
WLAN (Optional)		
Protocol Standard	IEEE 802.11b/g/n	
Rate	Supports 150Mbps	
Security Features	Open system, shared key, WPA/WPA2 authentication, WEP/TKIP/AES encryption	
Working Modes	AP、 Client Mode(WiFi STA)	
Transmission Distance	100m(Actual transmission distance depends on the environment)	
Intelligent Features		
Integrated DTU Functionality	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 throttling	
Configuration Methods	Supports Telnet, Web, SSH, and Console configuration methods	
Upgrade methods	Supports Web upgrade, FOTA upgrade method	
Logging Functionality	Supports local system logs, remote logs, serial port output logs	
Network Management Functionality	Support KEY-IOT Device Manager "Cloud Device Management" platform, batch management	
Simple Network Management Protocol(Optional)	Supports SNMP v1, v2, and v3, and SNMP TRAP	
Traffic management	Supports traffic threshold setting, traffic statistics, and traffic alert functionality	
Maintenance Tools	Ping, Traceroute	
Status Inquiry	System status, modem status, network connection status, route status	

Product Interfaces



Product Interfaces

单位:mm

unit:mm

