# Technical Specification for SR830 MINI 5G Router

Product Overview

The SR830 series products are IoT wireless routers which are integrated 4G/5G networks, virtual private networks, and other technologies. With the multi-DNN network slicing feature, they meet the differentiated needs of industry applications, providing network-level SLA guarantees and end-to-end security isolation. This device supports Vxlan functionality for practical layer 2 exchange networking and offers robust solutions for data centers

Product Features

- Supports the networks of major carriers (Mobile, Unicom, Telecom, Broadcasting)

- Supports dual SIM and eSIM

- Supports multi-DNN

- Supports 5G NR high-speed network and Redcap networks

- Equipped with 2 Ethernet ports

- Supports DIN rail mounting

- Supports dual power redundancy backup

- Supports efficient completion of large-scale device network deployments

- 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, including PPTP, L2TP, IPSEC, OPENVPN, GRE, GRETAP, Vxlan, etc

- Supports SNMP and Star Device Manager (Star Cloud) platform, enabling efficient remote centralized network management

Topology Diagram
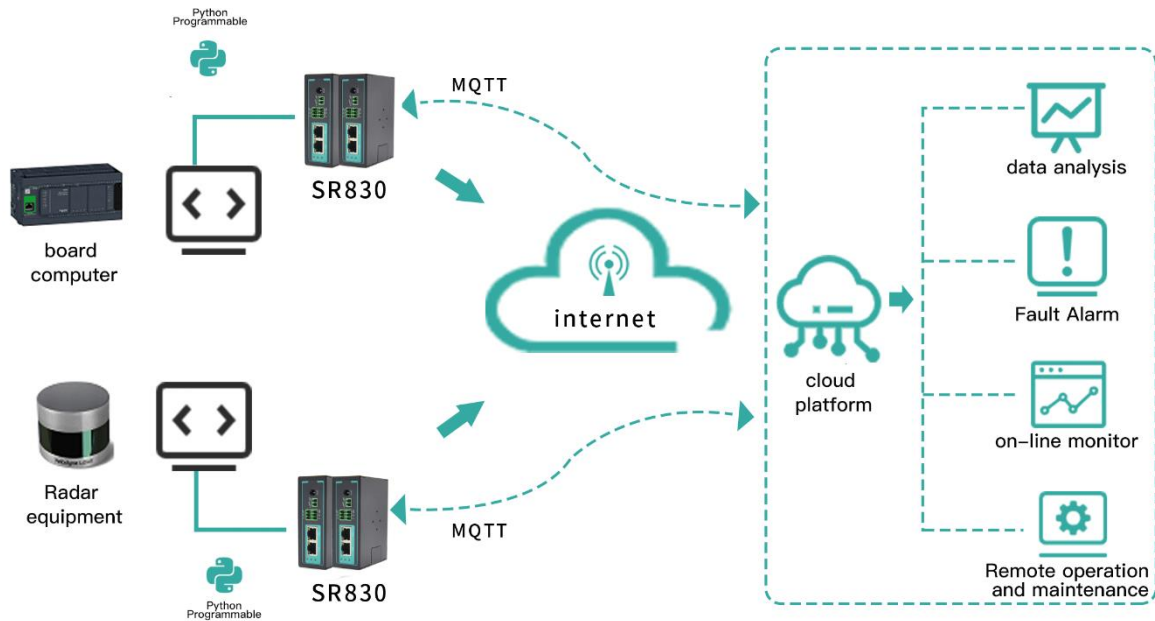
Technical Parameters

Hardware Performance	
Memory	512MB
FLASH	4GB EMMC
Network support	Industrial-grade 5G module
System time	Time synchronization using NTP technology with built-in RTC
Interfaces	
WAN port	1 WAN port,can be reused as LAN port
LAN port	1 (10M/100M/1000M adaptive MDI/MDIX port)
SIM Card Interface	1*flip card slot, 1*eSIM (optional).
TF Interface	1
Antenna Interface	4 (4G/5G antennas, impedance 50 ohms, SMA male interface)
Power	1(2-pin 3.81mm pitch connector), 1*DC jack
Serial Port	1* RS232(console)，1*RS485
Indicators	3 (1 PWR, 1 SYS, 1 NET)
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℃ (-31~+167℉)
Storage Temperature	-40~+85℃ (-40~+185℉)
Operating Humidity	5%~95% (non-condensing)
Equipment Ventilation	Natural heat dissipation, noiseless

Physical Characteristics	
Enclosure	Full metal enclosure
Dimensions	Length*width*height 100*75*35mm (excluding antenna and installation components)
Installation Methods	Desktop flat placement, DIN rail mounting, wall mounting
weight	Net weight: 030KG (excluding antenna and installation components)
	Gross weight: 0.60KG (with accessories and packaging box)

Device Security 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	Compliant with CCC, Rohs
MTBF	≥ 100,000 hours

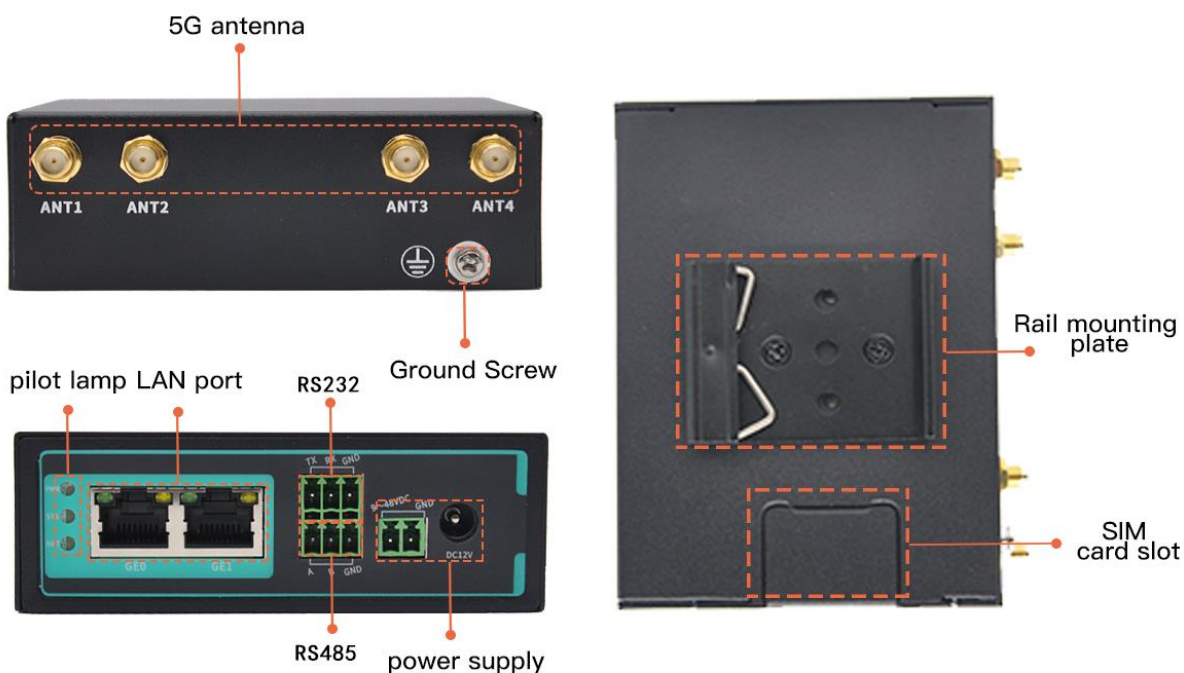| Software Features	
Network Access	Supports APN/VPDN/slice networks
Access Authentication	Supports CHAP/PAP authentication
Network Modes	5G Sub-6 SA/NASA/LATE/VCDMA
LAN Protocol	Supports ARP, Ethernet
WAN Protocol	Supports static IP, DHCP, PPPoE, PPP
IP Applications	Supports Ping, Trace, DHCP Server, 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, MQTT, MUDBUS, and other industrial protocols

Network Security	
Firewall	Full state packet inspection (SPI), defense against denial of service (DoS) attacks, filtering of 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/GRETAP/Vxlan/OPEN VPN/CA certificate

Reliability	
Backup Function	Supports wired, 5G, and mutual backup
Link Online Monitoring	Sends heartbeat packets for detection, automatically reconnects if disconnected

Embedded Watchdog	Device self-checking technology, self-repairing in case of faults
Intelligence	
Integrated DTU Function	Supports TCP, UDP transparent transmission mode, TCP Server mode, Modbus RTU to Modbus TCP bridge, DCUDP, DCTCP mode
Network Management	
QOS Management	Supports bandwidth limitation, IP rate limiting
Configuration Methods	Supports telnet, web, SSH, and console configuration methods
Upgrade Methods	Supports web upgrade, supports FOTA
Logging Function	Supports local system logs, remote logs, serial port output logs
Network Management Function	Supports Star Device Manager (Star Cloud) platform, batch management
Simple Network Management Function	Supports SNMP v1/v2/v3, supports SNMP TRAP function
Traffic Management	Supports traffic threshold setting, traffic statistics, and traffic alarm functions
Maintenance Tools	Ping, route tracking
Status Query	System status, modem status, network connection status, route status

Product Interfaces

Product Dimensions

单位:mm
unit:mm

44

35

100

90.3

35

27.4

84.5 75

90

10 26 74

6

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