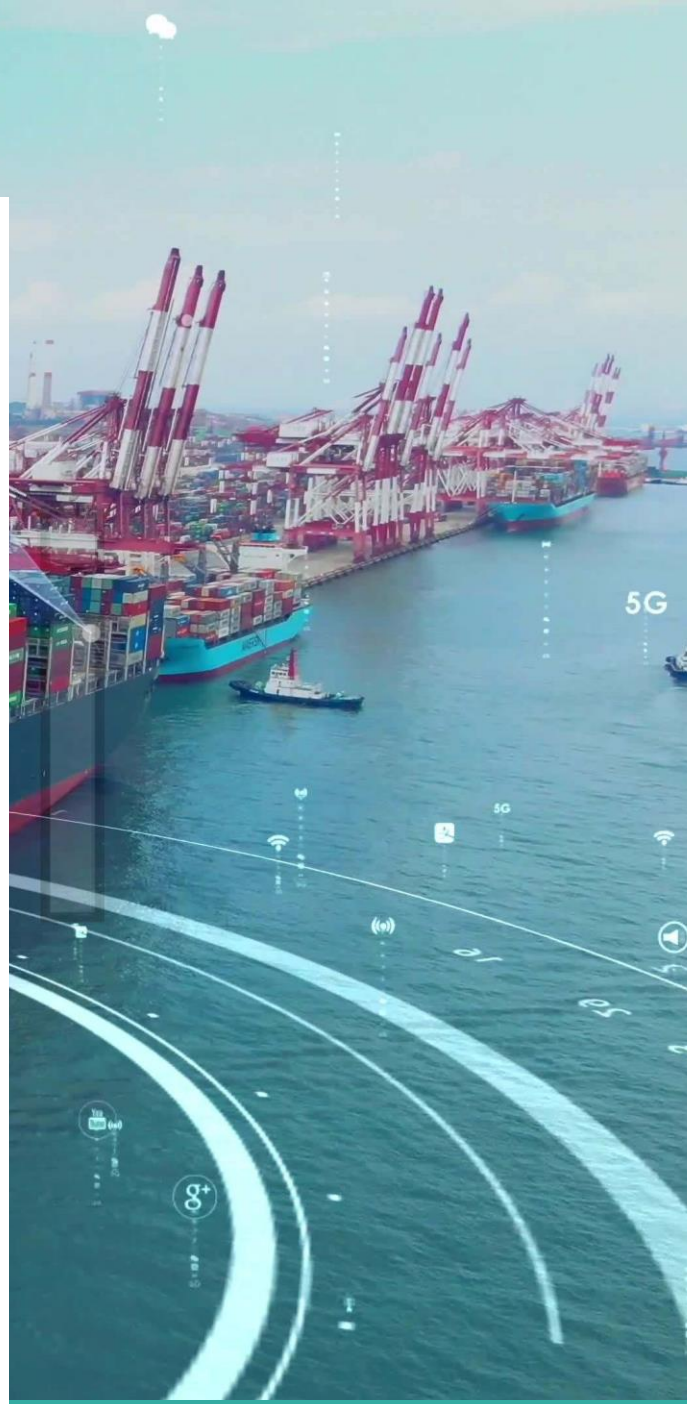


Technical Specification for SR810 (Waterproof 5G CPE)



VERSION NUMBER: **V2.1**

XIAMEN KEY-IOT TECHNOLOGY CO., LTD
www.key-iot.com



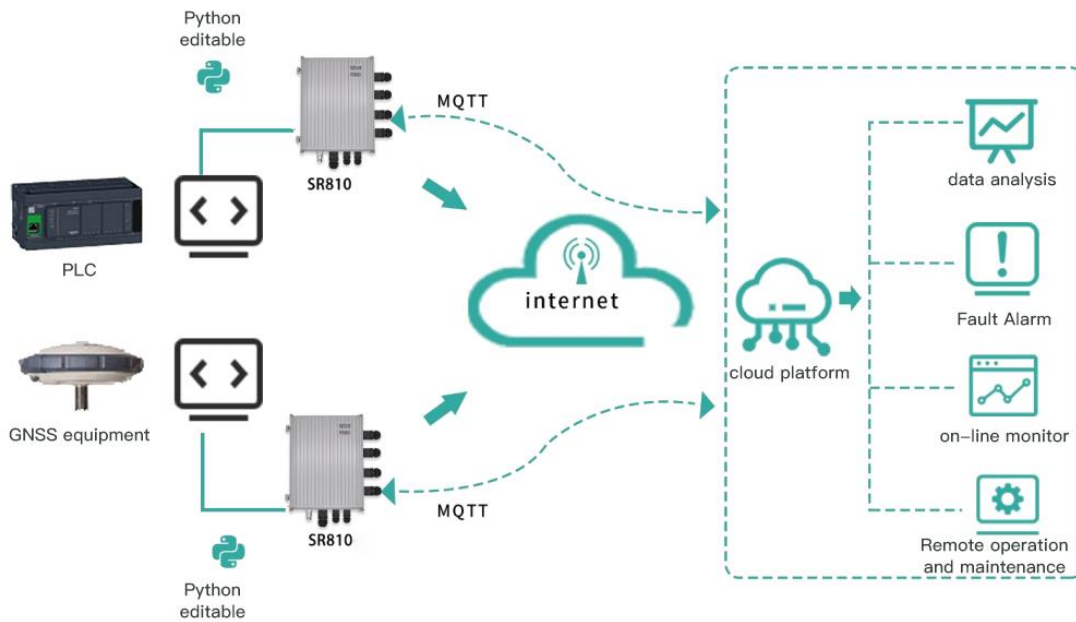
Product Overview

The SR810 series products are IoT wireless routers which are integrated 4G/5G networks, virtual private networks, and other technologies. With dual-network backup of 4G/5G wireless wide-area networks, 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
- Supports 1 Ethernet port
- Supports 2 WiFi (optional)
- Supports rail and desktop installation
- Supports dual power redundancy backup
- Supports dual carrier network backup (dual SIM cards)
- Supports efficient completion of large-scale device network deployments
- Industrial design, capable of withstanding challenging conditions
- Supports various VPN functions: PPTP, L2TP, IPSEC, OPENVPN, GRE, GRETAP, Vxlan, etc
- Supports SNMP and STAR DEVICE MANAGER cloud platform, enabling efficient remote centralized network management
- Supports Linux OpenWrt system, facilitating user secondary development with comprehensive development guides

Topology Diagram



Technical Parameters

Hardware Performance

Memory	512MB
FLASH	4GB EMMC
Network Support	Industrial-grade 5G module
System Time	NTP technology for time synchronization, with built-in RTC

Interfaces

LAN Port	1 Gigabit LAN Ethernet port (RJ45 waterproof connector), adaptive MDI/MDIX port
SIM Card Slot	2 slots (drawer type, supports 1.8V/3V SIM/UIM cards) (built-in card slot)
Antenna Interface	4 standard waterproof SMA male 5G antenna interfaces, 50-ohm impedance, 2 WiFi antenna interfaces, 50-ohm impedance
Power Port	1 waterproof 2-core power interface
Console Port	1 (5-pin 3.5mm spacing connector, 1 RS232 / 1 RS485) (built-in CONSOLE port)
Indicators	9 indicators (1 PWR indicator, 1 SYS indicator, 3 signal strength indicators, sim1, sim2, 1 WiFi indicator, 1 NET indicator) (built-in indicators)

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

Chassis	Full metal chassis
Dimensions	Length*Width*Height: 272*215*80mm (excluding antenna installation components)
Installation Method	Wall mounting
Weight	Net weight: 1.5KG (excluding antennas and installation components) Gross weight: 2KG (with accessories and packaging box)

Device Security and Reliability

Security 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	IP66
Certification	Complies 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

Network Security

Firewall	Full state packet monitoring (SPI), defense against 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 /OPEN VPN/CA certificate

Reliability

Online Link Monitoring	Sends heartbeat packets for detection, automatically reconnects when disconnected
Built-in Watchdog	Device self-checking technology, automatic fault repair

WLAN

Protocol Standard	IEEE 802.11b/g/n/ac/wifi6 ax (optional)
Rate	Up to 1774M
Security Features	Open system, shared key, WPA/WPA2 authentication, WEP/TKIP/AES encryption
Operating Mode	AP, Client mode
Transmission Distance	100m (actual transmission distance depends on the environment)

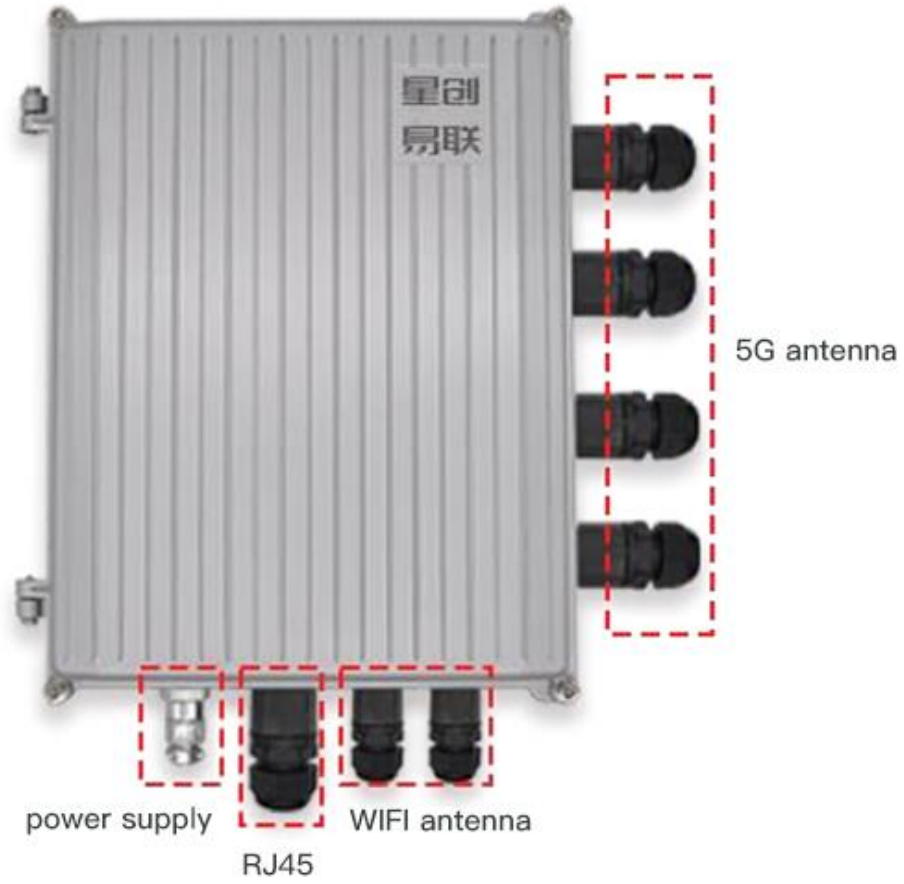
Intelligent Functions

Integrated DTU Function	Supports TCP, UDP transparent transmission mode, TCP Server mode, Modbus RTU to Modbus TCP bridge, supports DCUDP, DCTCP mode
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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
Logging Function	Supports local system logs, remote logs, serial port output logs
Network Management Function	Supports STAR Device Manager cloud platform for 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 tracing
Status Query	System status, modem status, network connection status, route status

Product Interfaces



Product Dimensions

单位:mm
unit:mm

