

S9931-CAT1



RICON S9931-CAT1 Router is based on 3G/4G LTE technology. It features a high-performance 32-bit processor and an embedded operating system. The router supports APN/VPDN private network access, ensuring reliable routing and data transmission. Optional GPS positioning enhances its convenience for use. These features make it widely used in telecommunications, finance, media, power, transportation, automotive, and environmental industries.

Features

- LTE / 4G
- IPSec VPN
- OpenVPN
- L2TP / PPTP
- GRE Tunneling
- DMVPN
- Firewall
- MAC / IP Filtering
- DoS/DDoS Protection
- HTTPS / SSH Access
- Static & Dynamic Routing
- BGP
- OSPF / RIP
- VLAN
- NAT / Port Forwarding / DMZ
- DHCP Server / Client
- Bridging / Passthrough
- Policy-based Routing (PBR)
- Web GUI (HTTPS)
- CLI (SSH / Telnet)
- SNMP
- Syslog / Event Log
- OTA Firmware Update
- SMS Command
- Cloud Management Platform
- Wi-Fi 4
- SSID / Multi-SSID
- WPA2
- MAC Filtering
- Serial Port (RS232/RS485)
- Connection Timers
- Ping / Uptime Watchdog
- Automation with SMS
- Task definition with script
- Modbus TCP / MQTT
- MQTT over TLS
- Identity-Based Firewall
- Cloud Access Control (CASB)
- TLS Inspection

Technical specifications

- Full Band-Scan
- Modem Band-Lock
- Auto/On-Demand Dial
- Enable/Disable Radio
- Pppd and DHCP Dialing Options

General specifications

CPU	MT7628AN
Memory	128MB
HW Watchdog	Connection schedulers Ping / Uptime Watchdog SMS automation Scripting tasks
SPI Flash	16MB

Interfaces and Configuration

LAN	1x10/100 Mb
WAN	1x10/100 Mb (Optional)
DHCP Server	DHCP Server/Client/Relay, DNS

Cellular Specifications

Cellular Modem Module	EG800K
Module Type	PCIE
Region	Global
Chipset	UNISOC 8910DM
Category	LTE: Cat.1
Cellular Bands (SDX62)	LTE-FDD: B1/3/5/7/8/20/28
SIM Support	1 x U-SIM Slot

Security Features

Firewall	Identity-Based Firewall Cloud Access Control (CASB) TLS Inspection
Filters	Access restriction Restricting wireless access
Misc	Security logging Security alarms Packet capture logging (Dump to file pcap)

GNSS / GPS Features

Chipset	ATGM336D
Supported Bands	GPS/ QZSS: L1 C/A, L5 GLONASS: L1 Galileo: E1, E5a BDS: B1I, B2a
Default Constellations	GPS + GLONASS + Galileo + BDS + QZSS
Number of Concurrent GNSS	4 + QZSS
Protocols	OSPF Routing protocols RIP Routing protocols WPA2 Wi-Fi encryption protocols Industrial data communication protocols
SBAS	WAAS, EGNOS, MSAS and GAGAN

Management Features

Management Interfaces	Web GUI (HTTPS) CLI (SSH / Telnet) SNMP Syslog / Event Log OTA Firmware Update SMS Command Cloud Management Platform
Version Management	Image Checksum Active version and backup version Auto rollback feature when remote upgrade fails
Accounts Management	Integrated Admin/Guest accounting TACACS/TACACS+, Radius Auth. Models
Retrievable Parameters WEB UI / CLI / TR-069 / SNMP	CLI Command-line access SNMP Remote monitoring and management Web-based graphical interface management

Cellular Modem Features

APN Data Services	Dynamic APN support SIM PIN management Bridge Mode Support
Modem Interface Configuration	Full band-scan Modem Band-Lock Auto/On-Demand dial Enable/Disable Radio Pppd and DHCP dialing options
Modem Failover	Support fail-over on interface drop. Support fail-over on traffic flow interruptions Support Automatic connection recovery.

Wi-Fi

Chipset	MT7628AN
Wi-Fi Specifications	Wi-Fi Radio : 1x1 MIMO / 20/40 MHz Frequency Band : 2.4 GHz only Client Capacity : Up to ~32 concurrent clients (depends on firmware/device) Wi-Fi Standard (2.4 GHz) : IEEE 802.11 b/g/n MIMO Configuration : 1x1 Channel Bandwidth : 20/40 MHz Modulation : BPSK, QPSK, 16-QAM, 64-QAM Tx Output Frequency Range : 2400–2483.5 MHz Maximum Data Rate : Up to 150 Mbps (with 40 MHz channel) Security Protocols : WEP, WPA, WPA2 (AES/TKIP) Total Wi-Fi Throughput : Up to ~150 Mbps (ideal conditions, 802.11n, 40 MHz)
Region	Global
Wireless Security	Protocols: WEP, WPA, WPA2 Encryption: AES, TKIP

Networking Features

Routing	Static Routing ,Dynamic Routing BGP OSPF / RIP VLAN NAT / Port Forwarding / DMZ DHCP Server / Client Bridging / Passthrough Policy-based Routing (PBR)
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Tunnels	IPSec VPN OpenVPN L2TP PPTP SSTP GRE Tunneling DMVPN Firewall MAC / IP Filtering DoS/DDoS Protection HTTPS / SSH Access
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Forwarding	NAT Support Port Forwarding DMZ Support
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Load Balancing	Per-Package Forwarding Support
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Ordering Information & Accessories

S9931-CAT1	CAT1 Cellular Radio Interface 1xLAN Fast Ethernet, 1xSIM Slots 2.4GHz Wi-fi 802.11b/g/n
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Defaults

Default Box Contents	1 x S9931-CAT1 Router Hardware 1 x 3M Antennas for 4G 1 x 4 PIN Terminal block connector 1 x 1m. CAT6 Ethernet patch cable
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About Ricon

At Ricon, we create technology that brings the communication handy.

As a 22 years B2B technology innovation company, we are designing networks that sense, think and act across mobile, fixed and cloud networks.

Service providers, enterprises and partners worldwide trust Ricon to deliver secure, reliable and sustainable networks today – and work with us to create the digital services and applications of the future.

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