

Efficiency Through Innovative Technology



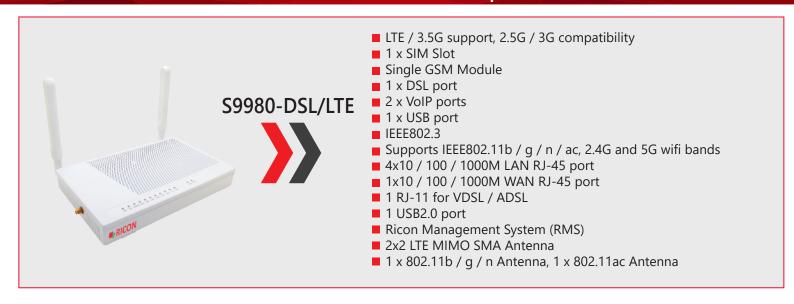
Product Overview

S9980-DSL/LTE

RICON S9980-DSL/LTE Router is designed and manufactured by Ricon Mobile Inc., it based on fixed ADSL and VDSL chipset and 3G/LTE cellular network technology. With its xDSL capability and embedded cellular module, it widely used in multiple case like ATM connection, remote office security connection, data collection. etc. This document introduced how to use S9980-DSL/LTE and its powerful features. S9980-DSL/LTE Router, supports tradition router functions like VPN, firewall, NAT, SNMP, DHCP. S9980-DSL/LTE supports 3G/LTE as WAN interface, provide up to 300Mbps downstream and 100Mbps upstream WAN bandwidth and up to 150Mbps Wi-Fi bandwidth. S9980-DSL/LTE Router comes with single port xDSL supporting ADSL/ADSL2/VDSL/VDSL2 modulations with a physical RJ11 port and single module single SIM hardware type. The unique feature of S9980-DSL/LTE Router is network online & backup among WAN, WLAN, 3G/LTE network.

S9980-DSL/VA Router supports Ricon Management System (RMS). By the management system, you can check running info of S9980-DSL/LTE Router and configure the router remotely and publish remote updates.

S9980-DSL/LTE Models & Quick Specifications



S9980-DSL/LTE Device Specifications

Routing Protocols

- Static Route
- » RIPv1
- » RIPv2
- >> OSPF
- » BGP

Servisce

- » Broadcasting
- » Multicasting

Temperature Recognition

- » Operation Temp.:-10°C ~ 40°C
- >> Store Temp: -40°C~+70°C
- » Related humidity: <95 (noncondensing)</p>

VPN

- » IPSec,
- » VPDN,
- » PPTP,
- » L2TP
- » OpenVPN



Specifications

S9980-DSL/LTE

Cellular Networks (Category 7)

- >> EDGE/GPRS
- FDD-LTE/TDD-LTE
- WCDMA/UMTS/HSPA/HSPA+/CDMA2000 EVDO/CDMA 1x
- >> Ethernet Standard
- **»** IEEE 802.3
- >> IEEE 802.3U

Wi-Fi



- Standard: IEEE 802.11b/g/n/ac
- >> AP, client, station, bridge mode support
- >> WEP, WPA and WPA2 encryption w/AES-TKIP
- » IEEE 802.11ac 5Ghz Wi-Fi support
- SSID Isolation support
- Channel manuplation support
- 20Mhz/40Mhz beamer support
- 3 64 Simultaneous users

Interfaces



- 3 4 x 10/100/1000 BaseT LAN Interface (MDI-X)
- >> 1 x 10/100/1000 BaseT WAN Interface
- 2 x SMA-K antenna connector (MIMO)
- 2 x Standard SIM/R-UIM Interface
-) 1 x Reset Switch
-) 1 x WPS Switch
- 1 x SD Card Interface
- >> 1 x DC Power socket
-) 1pcs RJ-11 for VDSL/ADSL

Indicators



- » Power LED
- Wifi LED
- >> WPS LED
- DSL LED*1
- >> LAN LED*4
- W USB LED*1
- Internet LED*1
- » Network LED (LTE/3G)
- » Reset Button
- >> WPS Button

Power



- On Idle: 80mA + 12VDC
- >> Single Module Power Consumption: <7W

Physical Specs



- » Dimensions: 190 mm x 35 mm x 165 mm
- >> Weight: 420 gr.

Easy Maintenance Operation

- >> Support local /remote firmware and patch upgrade
- >> Support parameter backup and import, Support encryption
- Support CFE firmware upgrade (Never about crash when doing upgrade)
- » Support Console port maintenance
- Support smart switch when using multiple server
- >> Local/Remote log for easy debugn

(RMS) Ricon Management System

- >> Great monitor capability
- » Remote terminal management maintenance
- >> Check status of internet at any time
- GIS showing device location
- Debug remotely
- >> Flow static and analyze

Certifications



Health	EN 62311
Safety	EN 60950 - 1+A11+A1+A12
» EMC	EN 301-489-1/-7/-17/-24
	EN 55022, EN 55024
» Radio	EN 301 511
	EN 301 908-1/-2
	EN 300 328
	Safety EMC









Functional Features

S9980-DSL/LTE

Device Management

- >> Local or remote web browser (IE v8 or above)
- CLI/Telnet command
- M2M management platform(optional)
- SSH config (optional)

Multiple Working Modes

- >> LED monitor
- >> Support WEB, CLI, SSH, multiple parameter management
- » Data trigger online/offline
- » LCP/ICMP/flow/heartbeat check, ensure network usability

Full Network Mode

- * 4G(TD-LTE/FDD LTE), DS-HSPA+, HSPA+, HSPA, WCDMA, EVDO, TD-SCDM,CDMA1x , EDGE/GPRS
- >> WAN, WLAN, SIM1\SIM2 multiple way network
- WLAN AP/station/repeater, 802.11n(802.11ac optional), at most 300Mbps, 2.4GHz & 5GHz
-) 1 LAN port
- WAN support ADSL(PPPoE), static IP, DHCP client
- Support VPDN, APN private network
- » 802.11b/g/n(ac optional) Wi-Fi optional, WPS key
- Supports DNS proxy and Dynamic DNS (DDNS)
- Device works as master or slave with the configuration in compliance with the RFC VRRP
- 3 4 VLANs (Tagged / Untagged Support)
- » Loopback IP address support
- >> SNMPv2, TR069
- » DHCP Server, DHCP Relay

Software Specifications

- Configuration: Auto channel scanning and selection Configurable BS profiles (frequency, bandwidth)
- >> Local WEB GUI: The Web GUI utilizes HTTPs for logging on to the device, it's easy to control the device.
- Debug Mode: RSSI level Packet error rate CINR, Dynamic Tx power Modulation
- >> Encryption/Decryption: AES SNOW3G NULL
- » MIMO: 2*2 SU-MIMO, Transmission Mode4(Close-loop spatial multiplexing)PDSCH, 2*2 close-loop spatial multiplexing should be supported.
- >> Beam forming (LTE): Transmission Mode 7
- >> Power Control(LTE): DL Power Control UL Power Control
- » Device Management: Web Access (Local)

Firewall & Filtering

- » IP packet/Domain/MAC Filter
- » NAT
- » DMZ
- Port Forwarding, DMZ support; Firewall for URL filter,
- » MAC filter, Dos;
- >> WAN Access Control;
- Support PIN and PUK based SIM card security;
- » Remote access control (HTTP)
- >> Telnet (CLI)

Feature

- Support OpenWrt
- » UDP/TCP management port and API
- » CPU: 88MP1826
- » RAM: 256 MB
- » Flash: 16Mb
- SIM/WAN backup

System Specification

- **»** DL: 300 Mbps
- >> UL: 100 Mbps
- » RxDiversity support
- » Built-in MIMO antenna (Optional External)
- >> Transmit: 4Tx
- » Receive: 4Rx
- >> Equlization support
- >> Support IP an PPP TYPE; Support PAP/CHA authentication

Ultra Secure Data Transmission

- >> VPN support VPDN/L2TP/PPTP/IPSec/OpenVPN
- >> IPSec over PPTP/L2TP
- Supports DHCP Server
- SNMP network management, NTP support, GPS clock support
- » OSPF, RIP, BGP optional
- Optional QoS (Quality of Service) smart control base on protocol, application,IP subnet
- » NAT mode/Routed mode



