

# Ricon Mobile

# S9922M2E



## 4.5G Industrial Router Datasheet

Efficiency Through Innovative Technology

## S9922M2E-LTE Industrial Router



**RICON S9922M2E-LTE Router** by Ricon Mobile Inc. industrial grade quality, designed and manufactured in accordance with 3G/LTE cellular network technology. With embedded cellular module, it is widely used in many cases such as ATM connection, remote office security connection, data collection etc.

Ricon Mobile S9922M2E-LTE router provides maximum service to customers while Zero Touch-SMS installation minimizes the need for field service with easy and automatic product installation service. S9922M2E Router, Single Module Single SIM hardware type. The best throughput value of the S9922M2E Router is 200 Mbps. The unique feature of the S9922M2E-LTE Router is that it is online and redundant over the network between WAN, WLAN, 3G/LTE network. This feature allows the S9922M2E to provide maximum network availability and reduce the likelihood of network failure to prevent losses due to network failures.

Mobile S9922M2E-LTE routers are web-based and easily routed through CLI. In addition, the Ricon Management System Controller (RMSC) successfully accomplishes the goal of reducing the maintenance costs with the ability to access all the Ricon products in the network and to access instant and statistical data on the web environment and manage them 100%.

### S9922M2E-LTE Model & Specification



#### S9922M2E-LTE



- LTE/3.5G support, 2G / 3G compatibility
- 1 x 10/100TBase Ethernet LAN interface
- 1 x 10/100TBase Ethernet LAN/WAN interface
- 1 x SIM slot (Passive backup)
- Single GSM module
- LTE+/LTE/DC-HSPA+/HSPA+/HSPA/(3G)WCDMA/2G
- WEB UI/CLI/SNMP/Telnet/SSH
- RMSC
- Component-level industrial design
- 2x2 LTE MIMO SMA antenna
- 802.11b/g/n Wi-Fi
- VLAN support (LINK TAG)
- 2x802.11b/g/n Antenna

### S9922M2E-LTE Router Specification

#### Interface



- » LAN : 1 x 10/100 BaseT
- » LAN/WAN : 1 x 10/100 BaseT
- » SMA-K (LTE MIMO) : 2 x LTE/3G/2G
- » SIM / R-UIM : 1 x USIM slot
- » Reset Switch : 1
- » WPS Switch : 1
- » DC Power Socket : 1

#### Indicator



- » LTE : RF indicator
- » POWER : Power indicator
- » WLAN : Wireless LAN connection
- » WAN : WAN connection status
- » NET : Network established
- » LAN : LAN connection status

#### Power Specification



- » On Idle : 80mA + 12VDC
- » Single Module Power Consumption : <5W
- » Power Feed : 5 - 36VDC

#### Mechanics



- » Dimension : 135mm x 101mm x 127mm
- » Weight : 300 gr.
- » Industrial aluminum alloy metal housing
- » IP54 safe

## S9922M2E-LTE Industrial Router

### Cellular Network



- » EDGE/GPRS
- » FDD-LTE/TDD-LTE
- » WCDMA/UMTS/HSPA/HSPA+/CDMA2000 EVDO/CDMA
- » IEEE 802.3
- » IEEE 802.3U

### Wi-Fi



- » Standard: IEEE 802.11b/g/n
- » AP, Client, Station, Bridge mode support
- » WEP, WPA and WPA2 encryption w/AES-TKIP
- » SSID isolation support
- » Channel manipulation support
- » 20Mhz/40Mhz beamer support
- » Dual mesh radio application with 802.11ac

### Routing Protocols

- |                            |                   |
|----------------------------|-------------------|
| » Static route             | » QoS             |
| » RIPv2/OSPF dynamic route | » NAT, SNAT, DNAT |
| » VRRP                     | » DMZ             |
| » BGP                      |                   |

### VPN

- » IPSec
- » PPTP/L2TP client
- » GRE/EoGRE
- » OpenVPN/DMVPN
- » VPDN/EoIP

### Device Management

- » Local or remote web browser
- » CLI/Telnet command
- » RMS Ricon Management System (optional)
- » SSH config (optional)
- » IEEE 802.11b/g/n (ac optional)
- » AP, Client, station, bridge mode support
- » WEP, WPA and WPA2 encryption

### Multipurpose Design

- » Wi-Fi Access Point for end user
- » Industrial type CAT4/CAT6 GSM Module (optional)
- » Wireless router with 3G/4.5G mobile network
- » Remote management and setup with RMSC or Zero Touch-RF
- » ModBus TCP Protocol support with RS232/RS485 interface

### Firewall & Filtering

- » IP packet/Domain/MAC filter
- » NAT, DMZ
- » DDos anti-attack
- » Port Scan Limit
- » Remote Access
- » VPN pass through
- » Stateful firewall

### Easy Maintenance

- » Local/remote software and patch upgrade support
- » Backup, import configuration
- » Easy to debug local/remote system log
- » Encryption support
- » Auto firmware update support

### 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



PTCRB

## S9922M2E-LTE Industrial Router

### RMSC (Ricon Management System Controller)

- » Excellent monitor feature
- » Data flow detail
- » Instant statistic data
- » Adjustable SLA Levels
- » SLA based live alarm control
- » Bulk remote configuration
- » Remote configuration with timer
- » Remote terminal management maintenance
- » Display of GPS device location (optional)
- » Remote debugging
- » Auto setup w/ZTP-RF

### Supported Network Protocols

- » 4G (TD-LTE/FDD LTE), DS-HSPA +, HSPA +, HSPA, WCDMA, EVDO, TD-SCDMA, CDMA1x, EDGE/GPRS
- » EWAN, WLAN, SIM1
- » WLAN AP/station/repeater, 802.11n up to 300Mbps
- » VPDN
- » 802.11b/g/n Wi-Fi
- » Supports DNS proxy and Dynamic DNS (DDNS)
- » APN
- » DHCP Client
- » VLAN support
- » Dual PDN/APN desteği

### Hardware Features

- » Support feature customize with API
- » CPU : 580MHz
- » SDRAM: DDR2 256 MB
- » Flash : 64 MB

### Industrial Design

- » Aluminum alloy outer housing, IP54 protection
- » System security isolation, particularly suitable for the application of industrial control field
- » Wide working power (DC 5-35V)
- » Support WDT
- » Antenna lightning protection
- » SIM/UIM port: 15KV ESD protection
- » Power port: reverse-voltage and overvoltage protection
- » Ethernet port: 1.5KV magnetic isolation protection

### Temperature Recognition

- » Operation Temp. : -40°C ~ + 75°C
- » Shelf Temp : -40°C~+85°C
- » Related humidity : %95 (noncondensing)

### Connection

- » Dual SIM single module for cold backup
- » Dual SIM dual module for hot backup or for load balance
- » SIM/WAN backup, dual SIM backup
- » WAN/SIM1/SIM2, links backup
- » Special design resistant to vibration produced in standards suitable for in-vehicle use.

### Secure Data Transmission

- » 1024 encryption GRE/L2TP/PPTP/IPSec/OpenVPN/EoGRE
- » GRE over IPSec, IPSec over PPTP/L2TP
- » Supports DHCP server, DHCP forwarding/relay
- » SNMP network management, NTP support
- » QoS (Quality of Service) protocol

# CONTACT

## RICON MOBILE INC. (HQ)

1100 Burloak Drive,  
Suite 300  
Burlington, Ontario  
L7L 6B2  
[riconrequest@riconmobile.com](mailto:riconrequest@riconmobile.com)  
Phone: +1 905 921 31 22

## RICON GLOBAL OFFICES

### RICON ITALY

Via Tiziano Nr. 32 20145 Milano (MI) ITALY  
[www.riconmobile.com/it](http://www.riconmobile.com/it)  
[riconitaly@riconmobile.com](mailto:riconitaly@riconmobile.com)  
Phone: +39 335 5444061

### RICON MOBILE INC. , LTD.

F5-Building 3,  
FengMenAo Industrial Park,  
Bantian Streets, Longgang District  
Shenzhen, 51829, China



**RICON İLETİŞİM A.Ş.**  
Ahi Evran Cad. No:21,  
Polaris Plaza Kat:6-8  
Maslak / İstanbul / Türkiye  
Phone: +90-212-346-2600