Ricon Mobile

P9922MC

4.5G Industrial PCBA Integrated Router Datasheet

Efficiency Through Innovative Technology

RICON

P9922MC Industrial Integrated PCBA Router
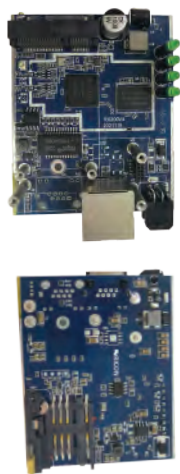
RICON P9922MC PCBA Integrated Router, by Ricon Mobile Inc. industrial grade quality, designed and manufactured in accordance with 3G/LTE cellular network technology to be integrated inside any electronic hardware needs wireless connectivity. With the embedded cellular module, it is widely used in many cases such as ATM connection, remote office security connection, data collection etc.

Ricon Mobile P9922MC router provides maximum service to customers while Zero Touch-SMS installation minimizes the need for field service with easy and automatic product installation service. P9922MC Router, Single Module Single SIM hardware type. The best throughput value of the P9922MC Router is 200 Mbps. The unique feature of the P9922MC Router is that it is online and redundant over the network between WAN, WLAN, 3G/LTE network. This feature allows the P9922MC to provide maximum network availability and reduce the likelihood of network failure to prevent losses due to network failures.

Mobile P9922MC 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%.

P9922MC PCBA Model & Specification
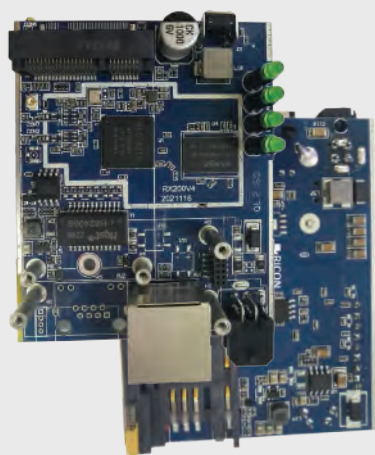
P9922MC PCBA

- LTE/3.5G support, 2.5G/3G compatibility
- 1 x 10/100TBase Ethernet LAN interface
- 1 x 10/100TBase Ethernet LAN/WAN interface
- 1 x RS232/RS485 interface (optional)
- 1 x SIM slot
- Single GSM module
- VLAN support (LINK TAG/UNTAG)
- LTE+/LTE/DC-HSPA/HSDPA+/HSDPA/WCDMA/2G
- WEB user interface UI/CLI/SNMP/Telnet/SSH
- RMSC
- Component-level industrial design
- 2x2 LTE MIMO SMA antenna
- 2 x 802.11b/g/n Wi-Fi antenna
- 802.11b/g/n Wi-Fi
- MODBUS-TCP protocol support (Optional)

P9922MC PCBA Integrated Router Specification

Interface

» LAN	: 1 x 10/100BaseT(MDI-X)
» RS232 / RS485	: 1 x 5 pin terminal socket
» SMA-K (LTE MIMO)	: 2 x LTE/3G/2G
» SIM / R-UIM	: 1 x USIM slot
» Reset Switch	: 1
» DC Power Socket	: 1 x 3 pin terminal socket

Indicator

» LTE	: RF indicator
» POWER	: Power status
» WLAN	: Wireless LAN connection
» WAN	: WAN cable connection status

Power Specification

» On Idle	: 80mA + 12VDC
» Single Module Power Consumption	: <5W
» Power Feed	: 5 - 35VDC

Mechanics

» Dimension	: 75mm x 60mm x 28mm
» Weight	: 80 gr.
» Industrial aluminum alloy metal housing (Optional)	
» IP54 case (Optional)	

P9922MC PCBA Integrated Industrial Router

Cellular Network

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

Wi-Fi

» Standard: IEEE 802.11b/g/n
» AP, Client, Station, Bridge mode support
» WEP, WPA and WPA2 encryption w/AES-TKIP
» IEEE 802.11ac optional 5Ghz Wi-Fi support
» SSID isolation support
» Channel manipulation support
» 20Mhz/40Mhz beamer support

Temperature Recognition

» Operation Temp.   :-40 °C ~ +75 °C
» Shelf Temp.   : -45 °C ~ +85 °C
» Related Humidity   : <%95 (non-condensing)

VPN

» IPSec
» PPTP/L2TP client
» GRE/EoGRE
» OpenVPN,DMVPN
» EoIP

Device Management

» Local or remote web browser
» CLI/Telnet command
» RMSC
» SSH config
» Wi-Fi

Integration Options

» Ethernet Internal Jumper
» Via PCIe Bus (Full Integration as Interface)
» UART/RS232 Controller Integration
» Terminal Block or Serial Cable

Firewall & Filtering

» IP packet/Domain/MAC filter
» NAT
» DMZ
» VPN pass through
» Stateful firewall

Hardware Feature

» CPU   : Arm Cortex Dual Core
» SDRAM : DDR2 256 MB
» Flash   : 64MB

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

Industry Canada   Industrie Canada

Canada

PTCRB

CE FC UL E57

P9922MC PCBA Integrated Industrial Router

Routing Protocols

» Static route
» Policy route
» RIPv2/OSPF dynamic route
» VRRP
» BGP

Maintenance Operation

» Local/remote firmware and patch upgrade support
» Backup, import configuration
» Easy to debug local/remote system log
» RMSC support

Secure Data Transmission

» 1024 bit 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

RMSC

» Excellent monitor feature
» IPFix support
» SLA based live alarm control
» Bulk remote configuration
» Remote configuration with timer
» Remote terminal management maintenance
» Display of GIS device location (optional)
» Remote debugging
» Flow static and analysis
» Automatic installation (RiconApps)

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）
» Antenna lightning protection
» SIM/UIM port: 15KV ESD protection
» Power port: reverse-voltage and overvoltage protection
» Ethernet port: 1.5KV magnetic isolation protection

Supported Network Protocols

» 4G (TD-LTE/FDD LTE), DS-HSPA +, HSPA +, HSPA, WCDMA, EVDO, TD-SCDM, 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

Optional Interface / Features

» RS232 Serial Port
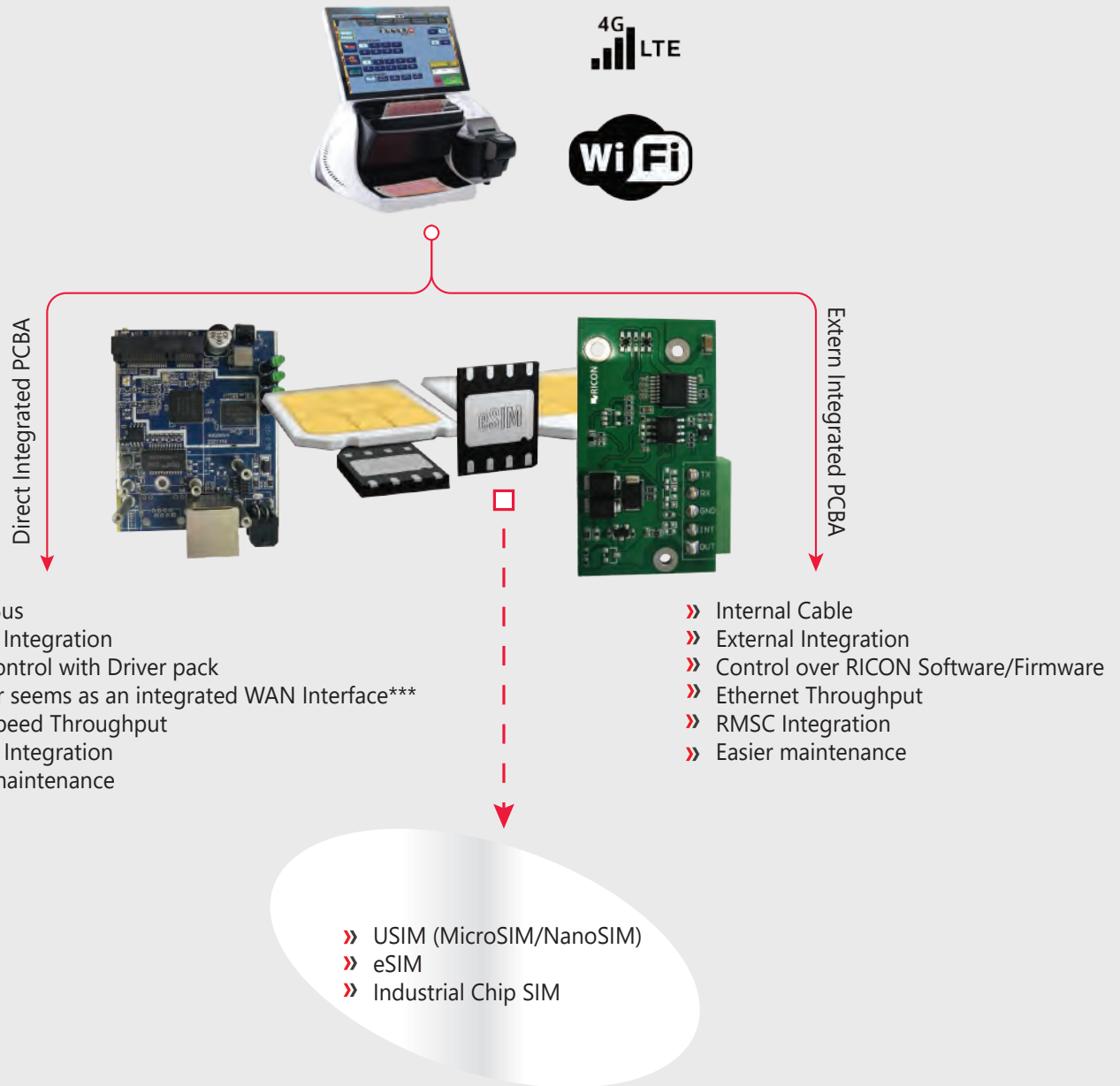» RS485 Serial Port
» 2 x Digital I/O
» Unmodulated UART
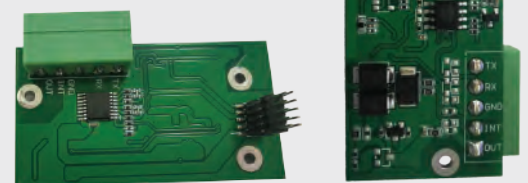
***The above options are available with an extension PCBA

P9922MC PCBA Integrated Industrial Router

Integration Options

Direct Integrated PCBA

Extern Integrated PCBA

» PCIe Bus
» Direct Integration
» Full Control with Driver pack
» Router seems as an integrated WAN Interface***
» Wirespeed Throughput
» RMSC Integration
» Easy maintenance

» Internal Cable
» External Integration
» Control over RICON Software/Firmware
» Ethernet Throughput
» RMSC Integration
» Easier maintenance

» USIM (MicroSIM/NanoSIM)
» eSIM
» Industrial Chip SIM

CONTACT

RICON MOBILE INC. (HQ)
1100 Burloak Drive,
Suite 300
Burlington, Ontario
L7L 6B2
riconrequest@riconmobile.com
Phone: +1 905 921 31 22

RICON ITALY
Via Tiziano Nr. 32 20145 Milano (MI)
ITALY
www.riconmobile.com/it
riconitaly@riconmobile.com
Phone: +39 335 5444061
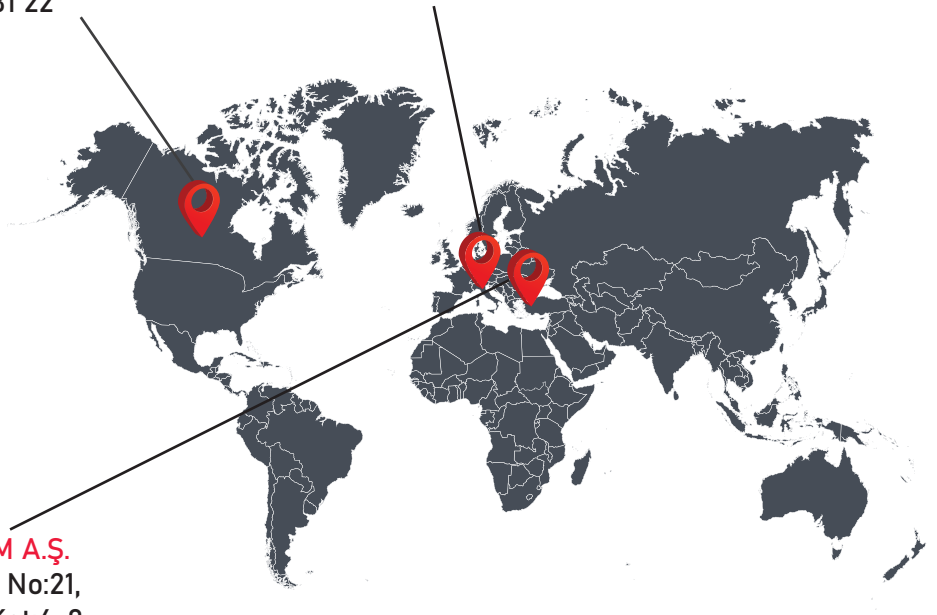
RICON ILETISIM A.Ş.
Ahi Evran Cad. No:21,
Polaris Plaza Kat:6-8
Maslak / Istanbul / Türkiye
Phone: +90-212-346-2600