



SPECIALIZED INDUSTRIAL MATERIALS

Cellular Router Modem - The GSM/GPRS Modem-RS232 is built with Quad Band

SIM-1934-X Series



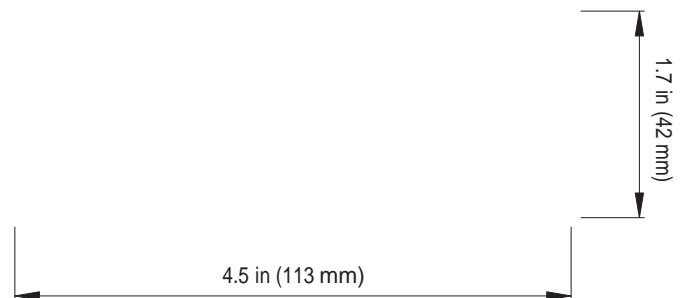
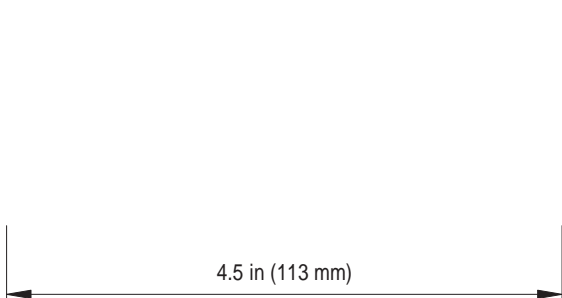
PRODUCT FEATURES

- GPRS/GSM cellular networks in one SKU
- Up to 115Kbps upload and 14.4Kbps download speeds
- Industrial design - wide operating temperature (SIM-1934: -15 to +60 °C; RT3G-3xx: -30 to +80°C)•
- GPS supported
- RS232
- Industrial Chemical Mix

The GSM/GPRS Modem-RS232 is built with quad band GSM/GPRS engine-SIM900 and works with frequencies 850/900/1800/19.0 MHz's. The modem is built with RS232 interface which allows it to be connected to a PC as well as a micro controller with RS232 chip (Max 232). The baud rate is configurable from 9600-115200 through AT command. The GSM/GPRS modem has a internal TCP/IP stack to enable you to connect with internet GPRS. It is suitable for SMS voice as well as data transfer application in M2M interface. SIM9 is a quad band modem capable of operating in 850, 900, 1800, 1900 MHz bands and is apt for worldwide compliance.

MECHANICAL DIAGRAM

MECHANICAL DIAGRAM - GSM MODELS



www.simaterials.com | ENABLING CONNECTED INTELLIGENCE

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SPECIALIZED INDUSTRIAL MATERIALS

Cellular Router

SPECIFICATIONS

SIM-1934

INTERFACES

| | |
|-------------------------------|----------------------|
| Standard | |
| Ethernet | 10/100 Mbps USB |
| | USB Type A host |
| Binary I/O | 1 input / 1 output |
| SIM 1 | SIM card |
| SIM 2 | None Dual Optio |
| Expansion Port Options | |
| | Ethernet 10/100 Mbps |
| | RS-232 |
| | RS-422/485 |

| |
|---|
| SMA – 50 Ohms |
| 3G: 2 dBi, penta band, right angle dipole (2) |
| WiFi: 1.8 dBi right angle dipole (1) |

TECHNOLOGY BANDS

| |
|-----------------------------|
| HSPA+/UMNT - None |
| EGPRS 850/900/1800/1900 MHz |
| CDMA None |

POWER

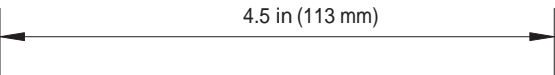
| | |
|--------|---------------------|
| Source | 10 – 30 VDC |
| | 300 mW receive mode |

| | |
|-------------|---------------------------------------|
| Consumption | Up to 3.5 W (GPRS transmission) |
| | Up to 5.5 W (UMTS/HSDPA transmission) |

| | |
|------------|--|
| Dimensions | 1.7 x 3.0 x 4.5 in (42 x 76 x 113 mm), 35mm DIN rail |
| Enclosure | Metal Weight |

ENVIRONMENTAL

| | |
|------------------------------|--------------|
| Operating Temperature | |
| RT3G-3xx-W | -15 to +60°C |
| RT3G-3xx | -30 to +60°C |
| Storage Temperature | -40 to +85°C |



3.0 in (76 mm)

FEATURES

| | | | |
|---------------------|-------------------|---------|---------|
| WiFi Specifications | None | | |
| RX Sensitivity | None | 11 Mbps | -85 dBm |
| | | 54 Mbps | -70 dBm |
| | | MSC7 | -66 dBm |
| TX Output Power | GSM | 11 Mbps | 19 dBm |
| | | 54 Mbps | 16 dBm |
| | | (HT20) | 15 dBm |
| | | (HT20) | 15 dBm |
| Security Protocols | WAP-PSK, WAP2-PSK | | |
| Authentication | TCIP, AES | | |

NETWORKING

| |
|---|
| DHCP – automatic IP addressing in LAN network |
| NAT – IP address and ports translation between inside/outside network |
| Firewall – filtering of addresses, ports, protocols |
| VRRP – virtual backup router function |
| DynDNS client – access to the router with a dynamic IP address |
| VLAN 802.11Q – virtual LAN |
| QoS – quality of service |
| Dial-in – Communicate via CSD call |
| PPPoE Bridge – PPP frames encapsulation inside ETH frames |

VPN TUNNELING

| |
|------|
| None |
|------|

CONFIGURATION AND DIAGNOSTICS

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|--|
| HTTP server – configuration |
| Telnet - none |
| SNMP – router diagnostics, communication with I/O and M-Bus |
| Cellular state signalization by LED |
| On-line info on cellular signal status (level, cell, neighbors) |
| SMS info – power on, cellular connection or disconnection |
| SMS control – on/off cellular connection, switch SIM, I/O, etc. |
| Transferred data counting, one more APN as backup |
| Remote router group configuration change, switching among configuration profiles |
| SSH – encrypted configuration and access to the file system |

ADDITIONAL FUNCTIONS

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|---|
| Linux based: program your own applications |
| IP client, Point to Point |
| SMS communication – AT commands on RS232, |
| AM memory inside – router statistic saved into memory |

APPROVALS / CERTIFICATIONS

| | |
|----------------|----------------------|
| | FCC Part 15, CE CI |
| Certifications | AT&T, T-Mobile, |
| CE | None |
| Emission | EN 55022/B |
| Immunity | ETS 300 342 immunity |
| Safety | EN 60950 |
| Isolation | EN 60747 isolation |