SocketModem[®] GPRS

Embedded Wireless Modem

Universal Socket Benefits

- Interchangeable socket modules
- Quick-to-market
- Global approvals
- Easy migration to future networks



The SocketModem[®] GPRS wireless modem is a complete, ready-to-integrate module that offers standards-based multi-band GSM/GPRS Class 10 performance. This quick-to-market module allows developers to add wireless communication to products with a minimum of development time and expense. The SocketModem GPRS wireless modem is based on industry-standard open interfaces and utilizes Multi-Tech's universal socket design.

Features

- GPRS Class 10
- Dual-band 850/1900 or 900/1800 MHz GSM/GPRS
- Packet data up to 85.6K bps
- Embedded TCP/IP stack
- Circuit-switched data up to 9600 bps transparent and non-transparent
- GSM Class 1 and Class 2 Group 3 Fax
- Short Message Services (SMS)
- Advanced management features include phone book management, fixed dialing number, real time clock and alarm management
- MMCX antenna connector and SIM socket
- SIM card holder
- Serial interface supports DTE speeds to 115.2K bps
- AT command compatible
- MNP 2 error correction, V.42bis compression
- Universal socket connectivity
- Two-year warranty







Highlights

Applications. The SocketModem GPRS wireless modem is targeted at applications that periodically need to send or receive data over a wireless network. It is ideal for:

- Appliances
- Asset tracking
- Remote diagnostics Remote metering

Security systems

Vending/gaming machines

- ATM terminals
- Automotive
- Data collection
- Other devices requiring wireless connectivity
- Industrial and medical remote monitoring systems

Integration Reduces Space, Power and Cost. The SocketModem GPRS wireless modem integrates the controller, RF transceiver, antenna interface and SIM socket in one module. This integration requires low power, low real estate and provides an overall reduction in costs.

- Reduces Development Time. The SocketModem GPRS wireless modem enhances your product while you focus on developing its core features. It actually provides faster timeto-market because it relieves the burden and expense of obtaining PTCRB and RF approvals.
- Internet-enabled. The SocketModem GPRS wireless modem includes an embedded TCP/IP protocol stack to bring embedded Internet connectivity to any device. Using the Internet protocols and the wireless connection to an IP network, it sends and receives data over the Internet.
- SocketModem GPRS Pin-Out. The SocketModem GPRS wireless modem interfaces easily with existing products through a standard serial communication channel. The serial DTE

channel is capable of transfer speeds to 115.2K bps and can be interfaced directly to a UART or microcontroller. The complete onboard RF transceiver interfaces with an antenna for direct connection to wireless SMS. circuit-switched dial-up, or packet data networks. It also includes an onboard

(I/O) Tip 1 (I/O) Ring 2 Safety Void 3 (O) TX+ 4 (O) TX- 5 (I) RX+ 6 (I) RX- 7 Safety Void 8 9 10	0 0 X 0 0 0 0 X		00000000000	64 SPKR (O) 63 GND (O) 62 MICV (I) 61 VCC (I) 60 -LED SPD (O) 59 -LED COL (O) 58 -LED LINK (O) 57 -LED ACT (O) 56 -LED FDX (O) 55
(O) TXCLK 11 (O) RXCLK 12 14 15 16 17 18 19 20	00	Universal Socket	0000	54 52 51 GPIO (I/O) 50 GPIO (I/O) 49 GPIO (I/O) 48 GPIO (I/O) 47 46 45
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LED to display network status.

Universal Socket Connectivity. Multi-Tech's universal socket is a flexible, comm-port architecture that provides cellular, Ethernet, PSTN or Wi-Fi network access with interchangeable modules. This means you can utilize one system design and populate it with your connectivity module of choice accommodating multiple connectivity requirements. In addition, you are assured a seamless migration to future technologies.

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Developer's Kit. The Developer's Kit allows you to plug in the module and use it for testing, programming and evaluation. The kit includes one development board with RS-232 DB-25 connector, universal power supply, antenna and RS-232 cable.

Specifications

Packet Data Features

GPRS Class 10, PBCCH support Coding Schemes: CS1 to CS4 Embedded TCP/IP stack

Circuit Switched Data/Fax Features

Asynchronous, transparent & non-transparent up to 14.4K bps, MNP2 & V.42 bis

Group 3 Fax, Class 1 & Class 2

SMS Features

Text & PDU, Point-to-Point, cell broadcast

Connectors

Antenna: MMCX SIM: Standard 3V SIM receptacle

IP Protocols Supported

ARP, Dial-in PPP, DNS Resolve, FTP client, ICMP, IP, IPCP, LCP, POP 3 (receive mail), PPP, SMTP (send mail), TCP socket, Telnet client, Telnet server, UDP socket, CHAP, PAP

Power Requirements

5VDC; 300mA typical, 1.3A maximum

Physical Description

3.1" L x 1.4" W x 0.5" H: 1 oz. (8.0 cm x 3.5 cm x 1.2 cm; 26 g)

Operating Environment

-20° to +55° C

Certifications

CE Mark, R&TTE EMC: FCC Part 2, 15, 22, 24, EN 55022, EN 55024 Safety: cUL, EN 60950, UL 60950 Network: PTCRB

Ordering Information

Product	Description
MTSMC-G*	GSM/GPRS I
Ordering Codes	Description
-F1	900/1800 M
-F2	850/1900 M

Modem

Region Regional

IHz GSM/GPRS IHz GSM/GPRS

* Use ordering codes for specific build options. Check with your local carrier to see which frequency bands are required. Go to www.multitech.com for detailed product model numbers

Made in Mounds View, MN, U.S.A.

Features and specifications are subject to change without notice.

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