

# SocketModem® GPRS

## Embedded Wireless Modem



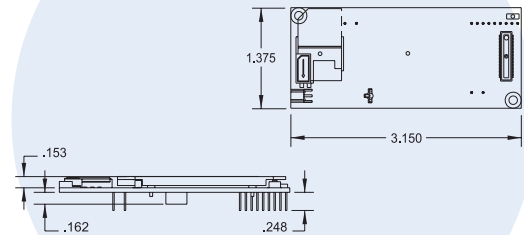
The SocketModem® GPRS wireless modem is a complete, ready-to-integrate module that offers standards-based multi-band GSM/GPRS Class 10 performance. This quick-to-market module allows developers to add wireless communication to products with a minimum of development time and expense. The SocketModem GPRS 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

### Benefits

- Easy integration
- Quick time-to-market
- Carrier approved
- Universal socket connectivity



## 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:

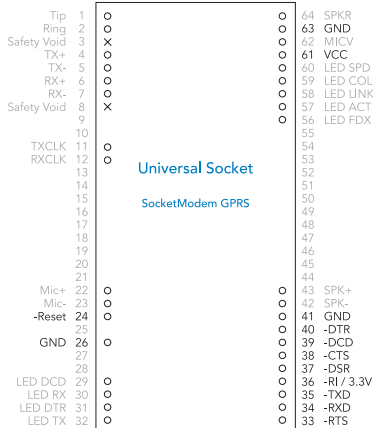
- Appliances
- Asset tracking
- ATM terminals
- Automotive
- Data collection
- Industrial and medical remote monitoring systems
- Remote diagnostics
- Remote metering
- Security systems
- Vending/gaming machines
- Other devices requiring wireless connectivity

**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 time-to-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 on-board 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 LED to display network status.



Note: Populated pins are highlighted.

**Universal Socket Connectivity.** Multi-Tech's Universal Socket flexible comm-port architecture provides analog dial-up, ISDN, wireless or Ethernet socket connectivity with interchangeable modules. This allows you to utilize one system design and populate it with your communication module of choice. In addition, you are assured seamless migration to future technologies.

**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, ICP, 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

-30° to +70° 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	Region
MTSMC-G*	GSM/GPRS Modem	Regional
Ordering Codes		Description
-F1	900/1800 MHz GSM/GPRS	
-F2	850/1900 MHz 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](http://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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