SocketModem® EDGE

Embedded Wireless Modem



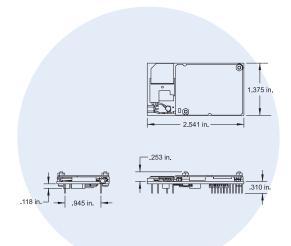
Benefits

- Up to 3X faster than GPRS modems
- Embedded Internet connectivity
- Universal socket connectivity

The SocketModem® EDGE wireless modem delivers some of the fastest cellular data speeds by utilizing EDGE technology. It allows users to connect to the Internet and send and receive data up to three times faster than possible with an ordinary GSM/GPRS network making it ideal for highly data-intensive applications. Based on industry-standard open interfaces, the SocketModem EDGE wireless modem is equipped with quad-band GSM, which means it can be used worldwide on all existing GSM networks. In addition, it utilizes Multi-Tech's universal socket design.

Features

- EDGE (E-GPRS) Class 10
- GPRS Class 12
- Quad-band GSM 850/900/1800/1900 MHz
- Packet data rates up to 240K bps (coding scheme, MCS-9, LLC layer, 4 time slots)
- Embedded TCP/IP stack supports TCP, UDP, DNS, FTP, SMTP, POP3, HTTP
- Circuit-switched data up to 14.4K bps non-transparent mode
- Supports Short Message Service such as text and PDU mode, point-to-point (MT/MO) and cell broadcast
- MMCX antenna connector
- SIM card holder
- Serial interface supporting DTE speeds to 460K bps
- AT command compatible
- FCC, PTCRB and R&TTE certified
- Voice features include Half rate (HR), Full rate (FR), Enhanced full rate (EFR), Adaptive multi rate (AMR), as well as hands free echo cancellation, and noise reduction
- Two-year warranty





Highlights

Applications. With packet data speeds up to three times faster than ordinary GPRS modems, the SocketModem EDGE wireless modem is targeted at highly data-intensive applications such as remote video surveillance and other multimedia applications where you are sending digital images, web pages and photographs.

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

Reduces Development Time. The SocketModem EDGE 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 EDGE wireless modem includes an embedded TCP/IP protocol stack to bring Internet connectivity to any device without making changes to its hardware design. Using the Internet protocols and the wireless connection to an IP network, it sends and receives data over the Internet.

SocketModem EDGE Pin-Out. The SocketModem EDGE wireless modem interfaces easily with existing products through a standard serial communication channel. The

serial DTE channel is capable of transfer speeds to 460K 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.

Tip 1 Ring 2 Safety Void 3 TX+ 4 TX- 5 RX+ 6 RX- 7 Safety Void 8 Dummy 9 10 TXCLK 11	0 0 X 0 0 0 0 X 0		00000000	64 SPKR 63 GND 62 MICV 61 VCC 60 LED SPD 59 LED COL 58 LED LINK 57 LED ACT 56 LED FDX 55 55
RXCLK 12	ŏ	Universal Socket		53 52
14 15				51 50
16		SocketModem EDGE		49
17 18				48 47
19 20				46 45
21 Mic+ 22			0	44 43 SPK+
Mic- 23 -Reset 24	0		0	42 SPK- 41 GND
25			0	40 -DTR
GND 26 27	0		0	39 -DCD 38 -CTS
28 LED DCD 29			0	37 -DSR 36 -RI / 3.3V
LED RX 30 LED DTR 31	0		0	35 -TXD 34 -RXD
LED TX 32	ò		0	34 -RXD 33 -RTS

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 a seamless migration to future technologies.

Developers 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

Specifications

Packet Data Features

EDGE: E-GPRS Class 10, Modulation & coding scheme MCS 1-9, Mobile station Class B

GPRS: GPRS Class 12, full PBCCH support, coding scheme 1 – 4. Mobile station Class B

Circuit Switched Data/Fax Features

Asynchronous, non-transparent up to 14.4K bps, Group 3 fax. Class 1

SMS Features

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

Connectors

Antenna: MMCX

SIM: Standard 3V SIM receptacle

IP Protocols Supported

TCP, UDP, DNS, FTP, SMTP, POP3, HTTP

Power Requirements

5VDC; 400mA typical

Physical Description

2.55" L x 1.4" W x 0.5" H; 1 oz. (6.48 cm x 3.5 cm x .87 cm; 20 g)

Operating Environment

-30° to +65° 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-E Quad-band EDGE Class 10 Global MTSMC-E-V Quad-band EDGE Class 10 (Voice) Global

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

Features and specifications are subject to change without notice.

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