

SocketModem® Cell



Embedded Cellular Modems

The SocketModem® Cell embedded cellular modem is a complete, ready-to-integrate communications device ideal for customers looking to add cellular communications to their solutions.

All of Multi-Tech's embedded modems provide carrier and end-device certification; decreasing your time to market and saving you money.

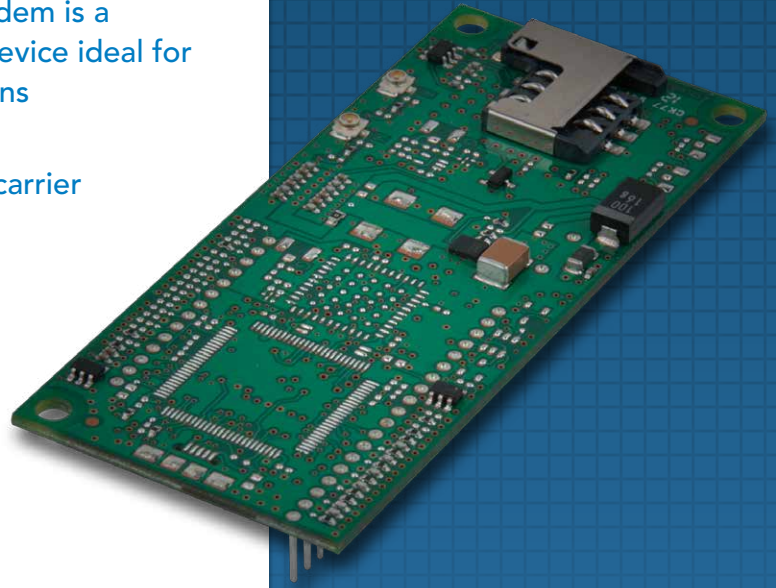
Key Features & Benefits

Features

- HSPA+, GPRS or CDMA2000 1xRTT communications
- Universal Socket connectivity
- Short Message Services (SMS)
- Serial or USB interfaces
- Serial interface supports DTE speeds to 921.6K bps
- AT command compatible
- USB 2.0 HS compliant (-H5 only)
- Two-year warranty

Benefits

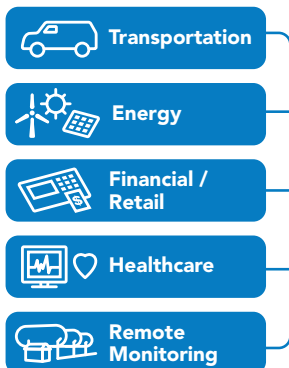
- **Approved by carriers and regulatory agencies** saving customers time, money, and protection from the risks associated with pursuing their own certifications.
- **Quick to market** leveraging Multi-Tech's approvals
- **Interchangeable communications devices** for easy migration to future networks
- **Long solution lifecycle** reduces redesign time and cost
- **High quality, reliable solution** delivers on the promise of "M2M Simplified"
- Support from the **leading experts** in M2M technology



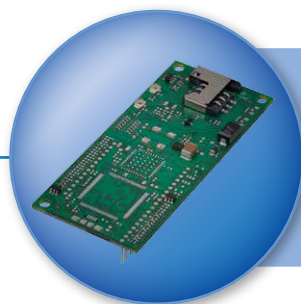
Applications

- 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

Your Devices & Data



Connecting Your Devices



Wireless Service Provider



Asset Management Platform

Insight + Action + Control



Alerts



Reports



Real-Time Management

Specifications

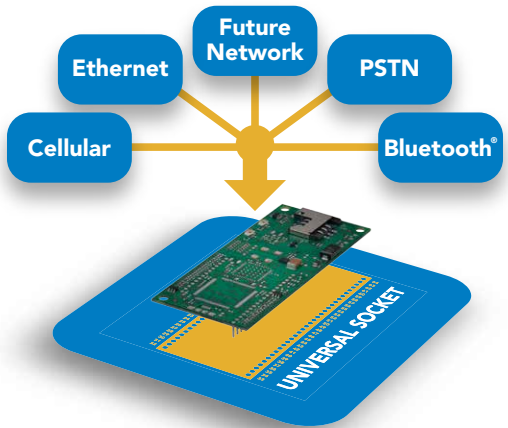
Models	MTSMC-H5	MTSMC-G2	MTSMC-C1
			
Performance	HSPA+	GPRS Class 10	CDMA2000 1xRTT
Frequency Bands	3G: 850/900/1700(AWS)/1900/2100 MHz 2G: 850/900/1800/1900 MHz	850/900/1800/1900 MHz	900/1800 MHz
USB	USB 2.0 High Speed	N/A	
TCP/IP Functions	DNS resolve, FTP client, Ping, PPP (dial-out), SMTP client, TCP client & server, UDP client & server, PAP, CHAP authentication	FTP, HTTP, POP3, SMTP, TCP Client & Server, & UDP Client	TCP Client & Server, & UDP Client
Connectors	Antenna: 2 UFL (Cellular, Rx Diversity) SIM Holder: Standard 1.8V & 3V	Antenna: 1 UFL SIM Holder: Standard 1.8V & 3V	1 UFL
Dimensions	3.15" x 1.375" (80.010 mm x 34.925 mm)		
Power Draw*	5VDC; 19mA sleep, 173mA typical, 397mA maximum 3.3VDC; 17mA sleep, 288mA typical, 610mA maximum	5VDC; 15mA sleep, 113mA typical, 240mA maximum	5VDC; 10mA sleep, 150mA typical, 585mA maximum
Input Power	3.3V - 5VDC	5VDC	
Environmental			
Operating Temperature	-35° to +85° C	-40° to +85° C	-30° to +70° C
Storage Temperature	-40° to +85° C		
Humidity	20% to 90% RH, non-condensing		
Certifications			
EMC Compliance	FCC Part 15 Class B, EN55022, EN55024		FCC Part 15 Class B
Radio Compliance	FCC Part 22, FCC Part 24, RSS 132, RSS 133, EN 301 511, EN 301 489-1, EN 301 489-3, EN 301 489-7, EN 301 489-24	FCC Part 22, FCC Part 24, RSS 132, RSS 133, EN 301 511, EN 301 489-1, EN 301 489-3, EN 301 489-7, AS/ACIF S042.1, AS/ACIF S042.3	FCC Part 22, FCC Part 24
Safety	UL 60950-1 2nd ED, cUL 60950-1 2nd ED, IEC 60950-1 2nd ED	UL 60950-1 2nd ED, cUL 60950-1 2nd ED, IEC 60950-1 2nd ED, AS/NZ 60950.1	UL 60950-1 2nd ED, cUL 60950-1 2nd ED, IEC 60950-1 2nd ED
Network	PTCRB		N/A
Carrier	AT&T		Aeris, Sprint, Verizon

* See device guides for additional information.

Highlights

Universal Socket Connectivity

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



Developer's Kit

The Developer's Kit allows you to plug in the communications device 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.



SocketModem Cell Pin-Out

The SocketModem Cell cellular modem interfaces easily with existing products through a standard serial communication channel. The serial DTE channel is capable of transfer speeds to 230K 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.

(I/O) Tip	1	○	64	SPKR (O)
(I/O) Ring	2	○	63	GND (O)
Safety Void	3	×	62	MICV (I)
(O) TX+	4	○	61	VCC (I)
(O) TX-	5	○	60	-LED SPD (O)
(I) RX+	6	○	59	-LED COL (O)
(I) RX-	7	○	58	-LED LINK (O)
Safety Void	8	×	57	-LED ACT (O)
	9		56	-LED FDX (O)
	10		55	
(O) TXCLK	11	○	54	
(O) RXCLK	12	○	53	
	13		52	
	14		51	GPIO (I/O)
	15		50	GPIO (I/O)
	16		49	GPIO (I/O)
	17		48	GPIO (I/O)
	18		47	
	19		46	
	20		45	
	21		44	
(I) Mic+	22	○	43	SPK+ (O)
(I) Mic-	23	○	42	SPK- (O)
(I) -Reset	24	○	41	GND (I)
(I) USB_VBUS	25	○	40	-DTR (I)
(I) GND	26	○	39	-DCD (O)
(I/O) USB_DP	27	○	38	-CTS (O)
(I/O) USB_DN	28	○	37	-DSR (O)
(O) LED DCD	29	○	36	-RI (O)
(O) LED RX	30	○	35	-TXD (I)
(O) LED DTR	31	○	34	-RXD (O)
(O) LED TX	32	○	33	-RTS (I)

Universal Socket

SocketModem Cell
(Voice Model)

Ordering Information

HSPA+ Models

Product	Description	Region
MTSMC-H5	HSPA+ Embedded Modem (Serial Interface)	Global
MTSMC-H5-U	HSPA+ Embedded Modem (USB Interface)	Global

GPRS Models

Product	Description	Region
MTSMC-G2	850/1900 MHz GSM/GPRS Modem	Global
MTSMC-G2-ED	900/1800 MHz GSM/GPRS Modem	Global
MTSMC-G2-V	850/1900 MHz GSM/GPRS Modem w/Voice	Global
MTSMC-G2-V-ED	900/1800 MHz GSM/GPRS Modem w/Voice	Global

CDMA Models

Product	Description	Region
For Sprint Networks		
MTSMC-C1-N2	CDMA2000 1xRTT Modem	Regional
MTSMC-C1-V-N2	CDMA2000 1xRTT Modem w/Voice	Regional
For Verizon Networks		
MTSMC-C1-N3	CDMA2000 1xRTT Modem	Regional
MTSMC-C1-V-N3	CDMA2000 1xRTT Modem w/Voice	Regional
For Aeris Networks		
MTSMC-C1-N16	CDMA2000 1xRTT Modem	Regional

Services & Warranty

Multi-Tech's comprehensive Support Services programs offer a full array of options to suit your specific needs. These services are aimed at protecting your investment, extending the life of your solution or product, and reducing total cost of ownership. Our seasoned technical experts, with an average tenure of more than 10 years, can walk you through smooth installations, troubleshoot issues and help you with configurations. Products include a 2-year warranty.

Installation Support

Multi-Tech's Installation Support Service delivers priority service with the ability to work one-on-one with an experienced Multi-Tech technical support engineer, to guide you through the installation process for our products.

Technical Support Services

At Multi-Tech, we're committed to providing you personalized attention and quality service while providing you a quick response to your product support needs. We have several options of support for you to choose from.

For additional information on Support Services as well as other service offerings, please contact your Multi-Tech representative or visit www.multitech.com/support.go.

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