

SocketModem® iCell

Intelligent CDMA Cellular Modem



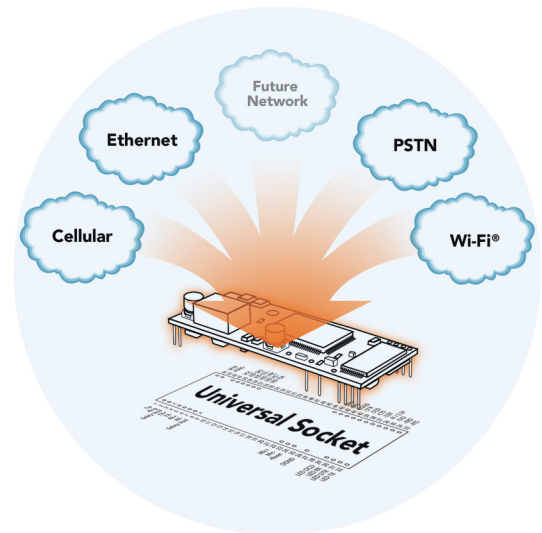
The Multi-Tech SocketModem® iCell intelligent cellular modem is a complete, ready-to-integrate communications device that offers standards-based dual-band CDMA2000 1xRTT performance. This quick-to-market communications device allows developers to add wireless communication and GPS tracking to products with a minimum of development time and expense. The intelligence of the embedded Universal IP™ stack allows for automatic/persistent connectivity for mission critical applications and enhanced M2M functionality. The SocketModem iCell intelligent cellular modem is based on industry-standard open interfaces and utilizes Multi-Tech's Universal Socket design.

Features

- CDMA2000 1xRTT
- Dual-band 800/1900 MHz CDMA
- Universal Socket connectivity
- Intelligent Universal IP stack for enhanced M2M functionality
- Models with GPS tracking capability
- NMEA-0183 V3.01 compliant GPS messages
- CDMA IS-95A, IS-95B backwards compatible
- Packet data up to 153.6K bps forward and reverse
- Circuit-switched data up to 14.4K bps
- Short Message Services (SMS)
- UFL antenna connector
- Serial interface supports DTE speeds to 230K bps
- AT command compatible
- CDG 1 and 2 network certified
- Two-year warranty

Universal Socket Benefits

- Interchangeable communications devices
- Intelligent Universal IP stack
- Quick-to-market
- Easy migration to future networks



Highlights

Applications. The SocketModem iCell intelligent cellular modem is targeted at applications that periodically need to send or receive data over a wireless network. It is ideal for asset tracking, fleet management, energy monitoring, mobile and home healthcare, ATM terminals, point-of-sale, security systems and remote monitoring applications.

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 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.

Universal IP. Multi-Tech's Universal IP consists of a common set of TCP/IP networking protocols and machine-to-machine (M2M) applications implemented using a standard AT command interface. Universal IP allows developers to write their host application one time while having the freedom to select from a growing number of Universal Socket communication devices.

Reduces Development Time. The SocketModem iCell intelligent cellular 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 CDG 1 and 2 network and RF approvals.

SocketModem iCell Pin-Out. The SocketModem iCell intelligent 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.

Ordering Information

| Product | Description | Region |
|----------------|------------------------------------|----------|
| MTSMC-C1-IP* | Intelligent CDMA 1xRTT Modem | Regional |
| MTSMC-C1-GP* | Intelligent CDMA 1xRTT Modem (GPS) | Regional |
| Ordering Codes | Description | |
| -N2 | For Sprint Networks (USA) | |
| -N3 | For Verizon Networks (USA) | |
| -N16 | For Aeris Networks (USA) | |

* Use ordering codes for specific build options. Go to www.multitech.com for detailed product model numbers.

Produced in the US of US and non-US components.

Features and specifications are subject to change without notice.

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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.

Specifications

Packet Data Features

CDMA2000 1xRTT, up to 153K bps forward & reverse channels

Circuit Switched Data/Fax Features

IS-95A, IS-95B up to 14.4K bps

SMS Features

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

Connectors

Antenna: UFL (one each, cellular & GPS)

IP Protocols Supported

DNS resolve, FTP client, Ping, POP3 client, PPP (dial-out), SMTP client, TCP RAW client & server, UDP RAW client & server, PAP, CHAP authentication

GPS

Position: 2.5 meters

Aquisition: Hot start 1 second; cold start 29 seconds avg.

Sensitivity: Tracking - 161 dBm

Protocol: NMEA-0183 V3.01, GGA, GLL, GSA, GSV, RMC, VTG

M2M Applications

Automatic connect/reconnect, device monitor, modem emulation, Ping & TCP keep alive, wake-up on Caller ID, wake-up on ring

Power Requirements

5VDC

IP Models: Sleep: 40mA (.2W @ 5VDC); Typical: 185mA (.92W @ 5VDC); Maximum: 560mA (2.8W @ 5VDC)

GP Models: Sleep: 130mA (.65W @ 5VDC); Typical: 270mA (1.3W @ 5VDC); Maximum 650mA (3.2W @ 5VDC)

Physical Description

3.1" L x 1.4" W x 0.5" H; 1.2 oz.
(8.0 cm x 3.5 cm x 1.2 cm; 34 g)

Operating Environment

-30° to +70° C

Certifications

EMC: FCC Part 15 Class B, 22, 24; IC: RSS 129, 132, 133; EN 55022

Safety: cUL 60950-1, EN 60950-1, UL 60950-1

Network: CDG 1 & 2

RoHS Compliant

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