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# MultiModem<sup>®</sup> iCell

# Intelligent CDMA Cellular Modem



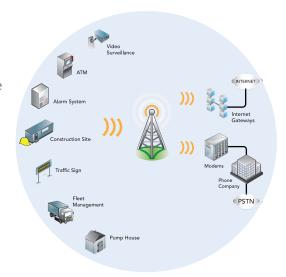
# **Benefits**

- Intelligent Universal IP stack
- Enhanced M2M functionality
- Programmable GPIO ports
- Carrier approved

The MultiModem® iCell intelligent CDMA cellular modem offers standards-based dual-band CDMA2000 1xRTT performance. This ready-to-deploy, standalone modem provides wireless data communication and GPS tracking and integrates seamlessly with virtually any application. The intelligence of the embedded Universal IP™ stack allows for automatic/persistent connectivity for mission-critical applications and enhanced M2M functionality. The MultiModem iCell intelligent cellular modem is based on industry-standard open interfaces and can be desktop or panel mounted.

# **Features**

- CDMA2000 1xRTT
- Dual-band 800/1900 MHz CDMA
- Intelligent Universal IP stack for enhanced machine-to-machine functionality
- Models with GPS tracking capability
- NMEA-0183 V3.01 compliant GPS messages
- Event monitoring and reporting via integrated GPIO ports
- Supports Short Message Service
- Available with RS-232 and USB 2.0 interfaces
- Packet data up to 153.6K bps
- Circuit-switched data up to 14.4K bps
- SMA antenna connector(s)
- Desktop or panel mounting
- FCC, IC and CDG certified
- AT command compatible
- Two-year warranty





# **Highlights**

Applications. The MultiModem iCell intelligent cellular modem with CDMA support is ideal for highly data-intensive, mission-critical applications such as remote video surveillance and other multimedia applications where you are sending digital images, web pages and photographs. For asset tracking and fleet management applications, models with a dedicated GPS receiver are available.

Universal IP for Enhanced M2M Connectivity. Multi-Tech's
Universal IP stack consists of a common set of TCP/IP
networking protocols and M2M applications implemented
using a standard AT command interface. Universal IP
provides developers a common programming interface
effectively future proofing their application as new cellular
technologies are introduced. Some of the benefits of
Universal IP are Automatic/Persistent Connectivity, Device
Monitor, Event Monitoring/Reporting, Ping & TCP Keep Alive
and Wake-up on Caller ID/Wake-up on Ring.

Reduces Development Time. The MultiModem iCell intelligent cellular modem can make your existing and next generation device communication-ready without requiring any hardware changes to its design. It actually provides faster time-to-market because it relieves the burden and expense of obtaining RF and carrier approvals.

Multiple Interface Options. The MultiModem iCell intelligent cellular modem is designed around a broad range of interface options including RS-232, USB and GPIO to provide you with seamless connectivity for your application. Each interface option offers unique features and benefits related to the technology it supports.

Comprehensive Service and Support. The Multi-Tech commitment to service means we provide a two-year product warranty and service that includes technical support, 24-hour web site and ftp support.

# **Ordering Information**

ProductDescriptionRegionMTCMR-C1\*Intelligent CDMA ModemRegionalMTCMR-C1-GP\*Intelligent CDMA Modem (GPS)Regional

**Ordering Codes** 

-N2 For Sprint Networks (USA)

-N3 For Verizon Wireless Networks (USA)
-N16 For Aeris Communications Networks (USA)

-NAM Includes US Style Power Plug

\* 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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# **Specifications**

## Packet Data Features

CDMA2000 1xRTT dual-band 800/1900 MHz CDMA IS-95A, IS-95B backwards compatible

## Circuit Switched Data

Asynchronous, non-transparent up to 14.4K bps

#### **SMS** Features

Text, Point-to-Point MO & MT, cell broadcast

#### Universal IP Features

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

## **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

#### Connectors

RF & GPS Antenna: 50 ohm SMA female RS-232: DE-9 female / USB: USB Type B Power: 2.5mm miniature screw

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GPIO: 6-pin Molex female with ESD protection

## Power Requirements

9V to 32VDC

#### **GPIO** Functions

Pin 1-2: Digital input, 24V tolerance

Pin 3-4: Configurable as digital input (5V tolerant TTL/CMOS levels); digital outputs (3.3V high), or ADC inputs (0 to 3.3V rail)

Pin 5: ADC input (0 to 3.3V rail)

Pin 6: Ground (must be connected to the ground of the attached device)

## Operating System Support

Windows 2000/XP/2003/Vista/2008/7 (32-bit/64-bit),

# Physical Description

4.9" w x 1.1" h x 3.5" d; 8 oz. (12.4 cm x 2.8 cm x 8.9 cm; 227g)

## Environment

Temperature Range:  $-40^{\circ}$  to  $+185^{\circ}$  F ( $-40^{\circ}$  to  $+85^{\circ}$  C) Humidity: 20% to 90% RH non-condensing

# Approvals

EMC Compliance: FCC Part 15 Class B

Radio Compliance: FCC Part 22, 24; RSS 132, 133 Safety Compliance: cUL 60950-1, UL 60950-1;

IEC 60950-1 Network: CDG 1 & 2 RoHS Compliant

