

# MultiModem® iCell

## Intelligent HSPA Cellular Modem



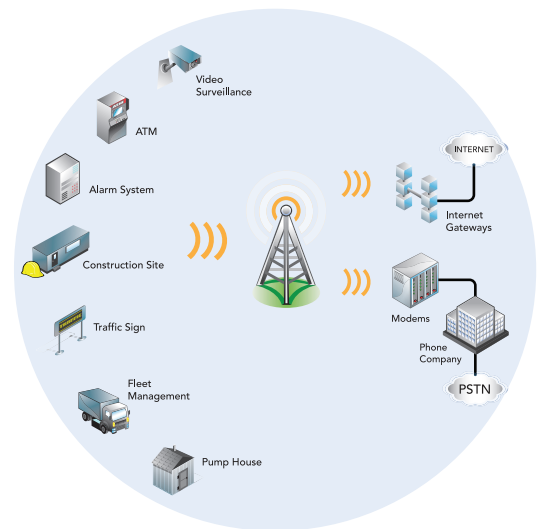
The MultiModem® iCell intelligent HSPA cellular modem offers standards-based tri-band HSPA 7.2 performance. This ready-to-deploy, standalone modem provides wireless data communication and integrates seamlessly with virtually any application. For asset tracking and fleet management applications, models with a dedicated GPS receiver are available. 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

- Tri-band HSPA 7.2
- Quad-band GSM/GPRS/EDGE
- 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 7.2M bps
- Circuit-switched data up to 14.4K bps
- SMA antenna connector(s) and SIM socket
- Desktop or panel mounting
- FCC, PTCRB and R&TTE certified
- AT command compatible
- Two-year warranty

## Benefits

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



## Highlights

**Applications.** The MultiModem iCell intelligent cellular modem with HSPA 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 PTCRB and RF 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 free technical support, 24-hour web site and ftp support.

## Ordering Information

Product	Description	Region
MTCMR-H4*	Intelligent HSPA Modem	Regional
MTCMR-H4-GP*	Intelligent HSPA Modem (GPS)	Regional

### Ordering Codes

-P1	Generic - Europe
-P2	For AT&T Networks (USA)
-NAM	Includes US Style Power Plug
-EU	Includes Euro Style Power Plug
-GB/IE	Includes UK Style Power Plug

\* Use ordering codes for specific build options. Go to [www.multitech.com](http://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

HSPA 7.2/UMTS/EDGE/GPRS  
HSPA: 7.2M bps max. download, 5.76M bps max. upload

### Frequency Bands

3G: 850/1900/2100 MHz  
2G: 850/900/1800/1900 MHz

### SMS Features

Text & PDU (MO/MT), Point-to-Point, 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  
GPIO: 6-pin Molex female with ESD protection  
SIM: Standard 1.8V & 3V SIM receptacle

### Power Requirements

9V to 32VDC (serial) or Bus powered (USB)

### 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)

### 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; 227 g)

### Environment

Operating: -22° to +122° F (-30° to +50° C)  
Storage: -40° to +185° F (-40° to +85° C)  
Humidity: 20% to 90% RH non-condensing

### Certifications

EMC Compliance: FCC Part 15 Class B; EN55022 Class B  
Radio Compliance: FCC Part 22, 24; RSS 132, 133; EN301 489-1; EN301 489-3 (GPS Models), EN301 489-7; EN301 489-24, EN301 511; AS/ACIF S042.1, S042.3  
Safety: UL 60950-1, cUL 60950-1, IEC 60950-1  
Network Compliance: PTCRB

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