# MultiModem<sup>®</sup> iCell

Intelligent HSDPA Cellular Modem



### **Benefits**

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

The MultiModem<sup>®</sup> iCell intelligent HSDPA cellular modem offers standards-based tri-band UMTS/HSDPA performance. This ready-to-deploy, standalone modem provides wireless data communication and integrates seamlessly with virtually any application. The intelligence of the embedded Universal IP<sup>™</sup> 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 UMTS/HSDPA 3.6
- Quad-band GSM/GPRS/EDGE
- Intelligent Universal IP stack for enhanced machine-to-machine functionality
- Event monitoring and reporting via integrated GPIO ports
- Supports Short Message Service such as text and PDU mode, point-to-point (MT/MO) and cell broadcast
- GSM circuit-switched data up to 9600 bps and UMTS circuitswitched data up to 64K bps
- RS-232 interface supports DTE speeds to 921.6K bps (effective throughput is 600-650K bps)
- USB 2.0 full speed interface (supported in a future firmware release, currently RS-232 only)
- SMA antenna connector and SIM socket
- Desktop or panel mounting
- FCC, PTCRB and R&TTE certified
- AT command compatible
- Two-year warranty





## **Highlights**

- Applications. The MultiModem iCell intelligent cellular modem with HSDPA support is ideal for highly dataintensive, mission critical applications such as remote video surveillance and other multimedia applications where you are sending digital images, web pages and photographs.
- 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 (supported in a future firmware release) 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, 24hour web site and ftp support.

# **Ordering Information**

Product MTCMR-H\* Ordering Codes -NAM -EU -GB/IE -AU/NZ

Description Intelligent HSDPA Modem

Region Global

Includes US Style Power Plug Includes Euro Style Power Plug Includes UK Style Power Plug Includes AU/NZ Style Power Plug

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

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

Features and specifications are subject to change without notice.

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# **Specifications**

#### **General Features**

Tri-band UMTS/HSDPA (WCDMA/FDD), 850/1900/2100 MHz, UMTS/HSDPA 3GPP release 5 HSDPA: 3.6M bps max. download, 384K bps max. upload

Quad-band GSM/GPRS/EDGE, 850/900/1800/1900 MHz

#### Packet Data Features

HSDPA: UE CAT [1-6], 11, 12 supported, Compressed mode according to 3GPP TS25.212 EDGE: Class 10, MCS 1-9 GPRS: Class 10, CS 1-4

#### Circuit Switched Data Features

GSM: Async, non-transparent up to 9600 bps (V.110) UMTS: Async, non-transparent up to 64K bps (V.120)

#### **SMS** Features

Text & PDU, Point-to-Point (MO and 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

#### Connectors

RF Antenna: 50 ohm SMA female

RS-232: DB-9 female

USB: USB Type B (future firmware release)

Power: 2.5mm miniature screw

GPIO: 6-pin Molex female with ESD protection

SIM: Standard 3V SIM receptacle

#### Power Requirements 9V to 32VDC

#### GPIO Functions

Pin 1-2: Programmable digital input/output Pin 3-4: Programmable digital input/output or ADC Pin 5 ADC

Digital inputs: 5V tolerant TTL/CMOS levels; digital outputs: 3.3V high; ADC inputs: 0 to 3.3V rail; Output current: 2mA max

#### 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: -30° to +60° C Storage: -40° to +85° C Humidity: 20% to 90% non-condensing

#### Certifications

#### CE Mark, R&TTE

EMC: FCC Part 15, 22, 24; EN 55022, EN 55024, EN 301 489-1, EN 301 489-7, EN 301 511; RSS 132, 133.102

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

AS/NRZ60950-1

Network: PTCRB

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