MultiModem[®] 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 dataintensive, 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

Product	Description	Region
MTCMR-C1*	Intelligent CDMA Modem	Regional
MTCMR-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 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), Linux

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° to $+185^{\circ}$ F (-40° 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



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