# effortless 2002 communications



Multi-Tech's extensive array of ready-to-deploy device networking products and solutions add instant M2M communications capability

### See what M2M means for your business

M2M (Machine-to-Machine) communications allows your company access to real-time data, so you can remotely monitor and manage assets, improve device functionality, facilitate better and faster decision-making, enhance services and reduce operating costs. The best part is that M2M is not only possible, but effortless with Multi-Tech.



40 years and 20 million devices, Multi-Tech is a world leader in M2M Solutions

## Enabling your M2M (machine-to-machine) innovation is both effortless and cost-effective with Multi-Tech Systems' award-winning cellular and analog modems.

#### Quick-to-Market & Cost Effective

Multi-Tech offers complete, ready-to-integrate cellular modems that carry global certifications, so you do not need to worry about obtaining your own approvals associated with communications technology. This saves significant time and expense, and allows you to bring solutions to market much quicker and get an edge on the competition.

## Embedded Device Networking Products for M2M Applications

#### Embedded Intelligent Cellular Modems

#### SocketModem<sup>®</sup> iCell

The SocketModem<sup>®</sup> iCell intelligent cellular modem is a complete, ready-to-integrate communications device that offers standards-based



quad-band GSM/GPRS Class 10 performance and a dedicated Global Positioning System receiver in GPS models, providing both M2M data communication and location capability for asset tracking and fleet logistics applications. This quick-to-market communications device allows developers to add cellular communication to products with a minimum of development time and expense. The intelligence of the embedded Universal IP<sup>™</sup> stack allows for automatic/persistent connectivity for mission-critical applicationss and enhanced M2M functionality. It's based on industry-standard open interfaces and utilizes Multi-Tech's Universal Socket design.

#### Embedded Cellular Modems

#### SocketModem<sup>®</sup> Cell

The SocketModem<sup>®</sup> Cell cellular modem is a complete, readyto-integrate communications device that offers standards-based quad-band GSM/GPRS Class 10 performance. This quick-to-market communications device allows developers to add cellular communication to products with a minimum of development time and expense. The SocketModem Cell cellular modem is based on industry-standard open interfaces and utilizes Multi-Tech's Universal Socket design.

#### SocketModem<sup>®</sup> HSDPA, SocketModem<sup>®</sup> EDGE, and SocketModem<sup>®</sup> CDMA

These cellular modems are complete, ready-tointegrate communications devices that offer standards-based tri-band UMTS/HSDPA, EDGE (E-GPRS) Class 12 and CDMA 2000 1xRTT performance respectively. These quick-to-market devices allow developers to add cellular communication to products with a minimum of development time and expense.



#### **Embedded Modems**

SocketModem<sup>®</sup> and SocketModem<sup>®</sup> IP The SocketModem<sup>®</sup> embedded modem includes the controller, data pump and data access ar-



rangement (DAA) in one device. With connect rates from 300 bps to V.92/56K, it is ideal for applications that periodically need to send and receive data over a standard telephone line. The SocketModem IP embedded modem integrates a complete data/fax modem solution and Universal IP<sup>™</sup> stack into one device.

#### Embedded Device Servers

#### SocketEthernet IP®

The SocketEthernet IP® embedded device server connects serial devices to an IP network. It is ideal for remote monitoring, control, maintenance and configuration of any system. It integrates a complete TCP/IP stack and a serial to Ethernet interface in



plete TCP/IP stack and a serial-to-Ethernet interface into a single Universal Socket design.

#### SocketWireless® Wi-Fi®

The SocketWireless® Wi-Fi® device server connects serial devices to an IP network via 802.11b/g wireless networking. It enables you to build wireless networking into virtually any device allowing for

remote monitoring, control and configuration. This space efficient communications device integrates Multi-Tech's Universal IP<sup>™</sup> stack for enhanced M2M functionality, making it a complete wireless connectivity solution that includes the network processor, media access controller and air interface.

#### SocketWireless® Bluetooth®

The SocketWireless® Bluetooth® device server utilizes Bluetooth technology to provide a secure, standards-based wireless connection between a host and peripheral device. Providing wireless data transfer up to 100 meters, it completely eliminates the need for serial cable connections.

#### Other Embedded Solutions

#### RJModem™

The RJModem<sup>™</sup> embedded modem is the most

compact, integrated modem solution that includes the controller, data pump and DAA in a unique RJ-11 form factor. With minimal engineering effort, it instantly adds global communication capabilities to any product design.

#### MMCModem<sup>™</sup> GPRS and MMCModem<sup>™</sup> CDMA

The MMCModem<sup>™</sup> GPRS and MMCModem<sup>™</sup> CDMA embedded cel-

MMCModem<sup>™</sup> CDMA embedded cellular modems include the controller, RF transceiver, SIM socket (GSM), and antenna connector packaged in a compact, rugged industrial chassis. These quick-



to-market solutions are based on industry-standard open interfaces and can be board-to-board or board-to-cable mounted.

#### Developer's Guide and Kit

The Universal Socket Developer's Guide assists you in evaluating the family of embedded connectivity solutions as you consider the different options for current, as well as, future requirements of your product strategy. Multi-Tech's 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 connectors, cables, universal power supply and Developer's Guide CD.

#### Protect Your Investment with Multi-Tech's Universal Features

Multi-Tech's embedded cellular modems offer Universal Socket design with a standard pin-out, providing cellular, Ethernet, PSTN or Wi-Fi® access via interchangeable communications devices. This assures a seamless migration to future networks. Multi-Tech's Universal IP<sup>™</sup> allows developers to write a host application only once, while having the freedom to select from a growing number of communications devices and use the latest 2G and 3G technologies.



#### Ready-to-Integrate Device Networking Solutions

When deciding how to enable your M2M solution, consider whether or not you want to tackle certifications and integration services. When you choose a ready-to-integrate, globally-approved Multi-Tech modem, the process is streamlined so you can focus on what you really care about: getting your solution to market quickly and cost-effectively.

## Standalone Device Networking Products for M2M Applications

Intelligent HSDPA Wireless Router

#### MultiModem<sup>®</sup> rCell

The MultiModem® rCell intelligent wireless router offers standards-based tri-band HSDPA performance via the integrated cellular modem. This ready-to-deploy, standalone router provides shared Internet access and integrates



seamlessly with virtually any application. The intelligent embedded operating system allows for automatic/persistent connectivity for mission-critical applications and enhanced M2M functionality. It includes 10/100BaseT Ethernet and RS-232 serial connectivity.

#### Intelligent Cellular Modems

#### MultiModem<sup>®</sup> iCell

The MultiModem<sup>®</sup> iCell intelligent cellular modems utilize standards-based HSDPA, EDGE

or GPRS technologies to provide wireless data communication over worldwide cellular networks. These-ready-to-deploy, standalone modems integrate seamlessly with virtually any application. The intelligence of the embedded Úniversal IP™ stack allows for automatic/persistent connectivity for mission-critical applications and enhanced M2M functionality. These modems are based on industry-standard open interfaces and can be desktop or panel mounted.

#### **Cellular Modems**

#### MultiModem<sup>®</sup> EDGE, MultiModem<sup>®</sup> GPRS and MultiModem® CDMA



networks. These modems are available with a broad range of interface options, including RS-232, USB and Ethernet.

#### Analog Modems

#### MultiModem<sup>®</sup> II

The MultiModem<sup>®</sup> II corporate modem provides V.92/56K data and 14.4 bps fax communications, a robust feature set, and an industrial chassis for rock-solid



reliability. It is ideal for corporations running mission-critical applications. In addition, it is approved for use in many countries around the world. Rackmount model is also available.

#### MultiModem<sup>®</sup> ZBA

The MultiModem<sup>®</sup> ZBA business modem supports remote configuration for centralized setup and control, as well as callback security. The V.92/56K models provide an increase in upload speeds and quicker connect times, V.34/33.6K fax and error correc-



tion mode. The V.90/56K models provide high-speed data transfer and fax capabilities. Globally approved for use in many countries around the world.

#### MultiModem<sup>®</sup> ZDX

The MultiModem® ZDX desktop modem delivers the highest-speed dial-up data transfer and faxing capabilities making it ideal for the mainstream PC market. Also available is the ZDXModemRack, which holds up to 12 devices.

#### MultiModem<sup>®</sup> IND

The MultiModem<sup>®</sup> IND is an industrial V.92/56K modem designed for rugged industrial and outdoor applications. The metal chassis and industrial-grade components allow for operation over a temperature range of -40° to +85°C and meet the reliability specifications for vibration and shock.



#### MultiModem<sup>®</sup> ZPX

The MultiModem<sup>®</sup> ZPX V.92 internal modem is approved for use in many countries around the world. It includes a built-in processor to enhance performance and data throughput, V.34/33.6K fax and error correction mode.

#### Analog-to-Wireless Converter

#### MultiConnect<sup>™</sup> AW

The MultiConnect™ AW analog-to-wireless converter is a convenient turnkey solution that allows legacy equipment with built-in analog



modems to connect to the cellular packet data or circuit-switched data networks. By emulating the traditional dial-up PSTN network and using integrated or external cellular modems, the affordable MultiConnect AW converter gives new life to devices currently using traditional analog dial-up communications.

#### Server Cards

#### MultiModem<sup>®</sup> ISI

The MultiModem® ISI server cards are ideal for companies requiring analog dial-up remote access or a dedicated fax server solution. They provide four or eight integrated V.92/56K modems and support for Universal PCI or PCI



Express. They also offer V.34/33.6K Super G3 fax and error correction mode.

#### Intelligent SMS Server

#### MultiModem<sup>®</sup> iSMS

The MultiModem® iSMS intelligent SMS server leverages text messaging to costeffectively send or receive information, instructions,

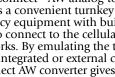


status updates or alerts. The ready-to-use solution simply plugs into an Ethernet network and connects to the cellular network via an integrated quad-band GSM modem(s). The API interface expands the functionality of the MultiModem iSMS with the integration of third party user applications for superior customization, automation and compatibility for M2M applications.









## Multi-Tech enables M2M solutions that significantly reduce costs, save time and enhance services

M2M (machine-to-machine) communications provides access to valuable data in real-time. This capability allows companies to remotely monitor and manage assets from anywhere in the world, improving device functionality, enabling better and faster decision making, and providing an overall reduction in operating costs. Companies in virtually every industry are leveraging the benefits of M2M to put to work many innovative solutions, and Multi-Tech is making this possible.



**TRANSPORTATION** Incorporating Multi-Tech cellular modems and GPS technology to deliver extremely accurate real-time data enables companies to locate and manage fleets of vehicles and implement a range of other applications, including access to accurate mileage, fuel usage and distance reports.

**ENERGY** As energy demand fluctuates, Multi-Tech Systems' cellular modems enable utility company sensor information to be monitored in real-time so electricity levels can be optimized to improve efficiency and reliability of power delivery.

**HEALTHCARE** Critical information from home health monitoring systems are delivered into patient records via Multi-Tech cellular modems. Medical professionals can detect subtle changes in patient conditions earlier and more regularly, which can save on costly hospital visits and potentially save lives.

**FINANCIAL** Multi-Tech cellular modems enable faster transaction speeds and lower communications costs for ATMs and Point-of-Sale terminals. Retailers can set up shop anywhere without worrying about obtaining access to a PSTN line.

**REMOTE MONITORING** There are endless uses for Multi-Tech's M2M solutions for remote monitoring applications, including security, parking meters, tank levels, temperature readings and more.

Visit www.MultiTech.com and see what M2M solution Multi-Tech can enable for your company.

"We looked long and hard at many other vendors before choosing Multi-Tech. This has been one of the best corporate decision we've made."

- Jeff Edelstein, CTO, AmeriTrak Fleet Solutions, LLC

## 40 years and 20 million devices, Multi-Tech is a world leader in M2M solutions

Multi-Tech Systems is a global manufacturer of award-winning products that connect data over cellular and analog networks from anywhere in the world. As a leader in the industry for 40 years, Multi-Tech's reputation for reliability and innovative design is evident with 80+ patents, 20+ million devices being used by thousands of customers worldwide and certifications from more than 30 carriers and over 80 countries. Multi-Tech is certified by the WBENC as a Women's Business Enterprise and by C-TPAT (Customs–Trade Partnership Against Terrorism).

Call Multi-Tech today or visit us online at www.MultiTech.com.

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