Offender Monitoring goes Wireless/Cellular

**Background**
BI Incorporated (BI) provides monitoring technologies for low- to high-risk parolees, probationers, pretrial defendants and illegal aliens involved in the U.S. immigration court process.

For every 100 inmates diverted to community supervision from prison or jail, counties estimate a $4 million annual savings. For individuals under supervision, a person without a land line would have to report to an agency 2 or 3 times per week to download device data, often requiring lengthy travel time and difficulties maintaining a job due to reporting requirements during business hours. **A cellular device installed in the home alleviates all of those issues.**

**Application**
If electronic offender monitoring is sanctioned by a court, landline installation is not always possible due to high cost, poor homeowner credit, or other reasons. The Multi-Tech M2M solution enabled BI to modify their existing product line without going through the expense of developing a new product.

Multi-Tech assisted BI in implementing cost effective solutions for two product lines: the radio frequency monitoring (i.e., house arrest) product line, and the transdermal alcohol monitoring product line. This M2M approach provides BI customers with more technology options and greater efficiencies for law enforcement agencies, which also translates to an increased use of community-based supervision, reduced offender recidivism, and enhanced public safety. With the growing need for cellular technologies, BI is leading the effort to further integrate M2M into its continuum of products.

**Solution and Benefits**
BI’s offender solutions utilize a Multi-Tech SocketModem® embedded cellular modem, which is approved by major cellular carriers as an end-device. This means BI did not need to pursue additional carrier approvals once it was integrated into the product design. The SocketModem’s Universal Socket design allows for a variety of connectivity technologies without needing a redesign, in essence future-proofing the design.

No changes were required to the existing BI communications protocols. BI was able to leverage the AT command interface in the modem to open a socket connection that provides the M2M communication to BI TotalAccess®, a consolidated monitoring platform. Modifying the communications servers to support the M2M data stream was a relatively straightforward task.
Partnership
Thanks to M2M communications enabled by a carrier-approved, ready-to-integrate embedded cellular modem from Multi-Tech Systems, BI was able to quickly bring to market a solution that allows real-time access to data from remote assets. The relationship with Multi-Tech Systems allievated the many issues BI had with reliability and connectivity. In addition, BI was able to select the most cost-effective solution for their needs.

Multi-Tech Embedded Cellular Modems
The SocketModem® Cell cellular modem is a complete, ready-to-integrate communications device that offers 2G or 3G GSM or CDMA performance. These quick-to-market, carrier-approved communications devices allow developers to add wireless communication to products with a minimum of development time and expense. The SocketModem Cell cellular modems are based on industry-standard open interfaces and utilize Multi-Tech’s Universal Socket design.

SocketModem® Cell Embedded Cellular Modems
- Interchangeable communications devices
- Quick-to-market
- Easy migration to future networks
- Serial or USB interface

About BI Incorporated
BI provides a full continuum of offender monitoring technologies and community reentry services for parolees, probationers, pretrial defendants and illegal aliens involved in the U.S. immigration court process. BI also owns and operates an ISO-certified national monitoring center, providing 24/7 expert support supervision services exclusively to governmental agencies.