

# Dixon Automatic Tool

## Industrial Modem for Remote Monitoring and Diagnostics

### The Challenge

After-sales services provide a means for manufacturers to differentiate themselves in many highly competitive industries. The problem is, it can be costly for many companies, especially those that manufacture equipment that requires on-site servicing.

Dixon Automatic Tool, a manufacturer of automated assembly machines and systems, saw the need for an industrial solution that provided machine tool manufacturers the ability to provide technical services remotely from a factory location. This simple solution provides manufacturers with the ability to save valuable time and travel costs and gives them the competitive edge they need to really capitalize on and profit from the growing after-sales service trend.

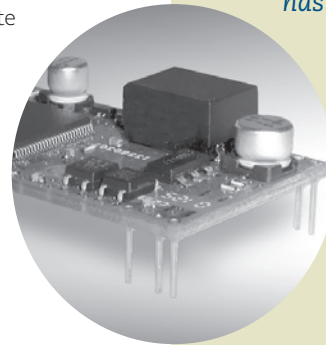
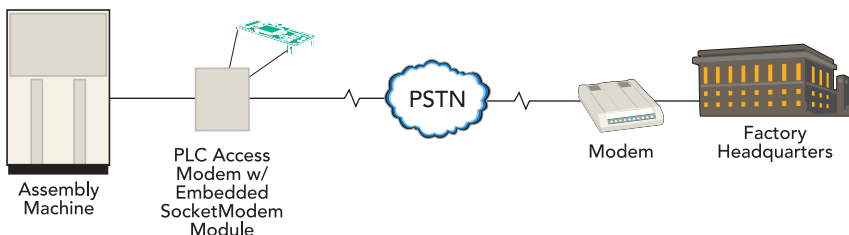
### The Solution

Dixon Automatic Tool developed the PLC Access® Modem to meet the after-sales service challenge. It is an electronic module that can be connected to Programmable Logic Controllers (PLC) used in various industries. This connection allows for the transfer of the ladder logic program to, or from, the remote location. Modification, correction, or troubleshooting of the ladder logic can be accomplished remotely, and the revised ladder logic program can be transferred back to the PLC.



### The Multi-Tech SocketModem

The engine driving the data connection is the Multi-Tech SocketModem® embedded modem. The space efficient design (1" x 2.5") of the SocketModem module allows for seamless integration into the PLC Access modem hardware. It provides V.92/56K data rates, full-duplex data transmission, AT command compatibility, and remote hang-up detection. In addition, it offers global approvals with a single module design allowing Dixon to ship one modem worldwide.



**Dixon Automatic Tool, Inc.** founded in 1946, specializes in manufacturing automated assembly products and machines. The Company has now developed the PLC

Access® modem to monitor or reprogram a machine's Programmable Logic Controller (PLC) from a remote location. The

Dixon PLC Access® modem

enables a remote technician to connect to a machine's PLC through the programming port and an analog phone line to perform control diagnostics. The heart of their solution is the Multi-Tech SocketModem module, which provides the dial-up data connection.

“ We chose the Multi-Tech SocketModem because of its quick-to-market design. ”

- Paul Dixon, President, Dixon Automatic Tool

## The Multi-Tech SocketModem (cont.)

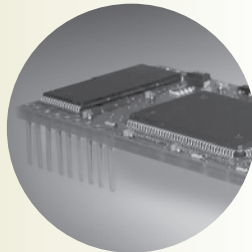
"Diagnosing and correcting problems from the manufacturer's factory location provides a competitive advantage that is hard to come by in today's mature markets," explains Paul Dixon, President of Dixon Automatic Tool. "By allowing the manufacturer to service their machines without sending a service technician not only saves time and travel costs, but it also provides faster service, virtually eliminating system downtime."

The PLC Access Modem requires only an RS-232 serial port, an analog telephone line and a +5V dc power source (accomplished through a small AC adapter provided or panel transformer). The PLC Access Modem parameters such as speed and data format are set by the SocketModem AT commands.

"We chose the Multi-Tech SocketModem because of its quick-to-market design," explains Dixon. "Its small packaging fit well with our own hardware design, and because it was easy to program, we were able to save time and costs and get to market faster."

## SocketModem

- Complete data/fax modem solution including the controller, data pump, and DAA
- Space efficient universal socket connectivity
- Telecom approved in more than 50 countries
- V.92/56K, V.34/33.6K, V.32bis/14.4K and V.22bis/2400 bps data rate options
- V.34/33.6K or V.17/14.4K fax
- Fax Class 1 and 1.0
- V.44 and V.42bis data compression
- V.42 error correction
- Intelligent DAA technology detects line status
- Low power/sleep mode
- FastPOS (V.29) and V.22bis Fast Connect
- 3.3V or 5V power input options
- Serial or parallel interfaces



## Dixon Automatic Tool,

**Inc.** Dixon Automatic Tool was founded in 1946, and is a privately owned Company. The Company specializes in the design and manufacture of automated assembly products and machines. Dixon's assembly machinery specializes in automated processes such as screw driving, part placing, and part pressing of plastic and metal parts. The Company has now developed the PLC Access® modem to monitor or reprogram a machine's Programmable Logic Controller (PLC) from a remote location. The heart of their solution is the Multi-Tech SocketModem module, which provides the dial-up data connection.



### For more information contact:

Dixon Automatic Tool  
Telephone: 815-226-3000  
FAX: 815-226-8613 or  
E-mail: [sales@dixonautomatic.com](mailto:sales@dixonautomatic.com)  
Web: [www.dixonautomatic.com](http://www.dixonautomatic.com)