**FOR IMMEDIATE RELEASE**

Contact:
David Crump, Marketing Communications
800.321.6786 / 951.695.3010
dcrump@opto22.com

Electronic copies of this release and related photographs are available at
http://www.opto22.com/pressroom

# Opto 22 Breaks New Ground in Wireless Networking

## Company's SNAP PAC programmable automation controllers and I/O are first to offer 802.11a/b/g wireless networking along with standard Ethernet networking

**Temecula, CA – April 14, 2009** – Opto 22, developer and manufacturer of the award-winning SNAP PAC System™ family of programmable automation controllers, I/O, and accessories, has developed a unique offering for the automation industry by providing both wireless and wired Ethernet networking options on its standard SNAP PAC programmable automation controllers (PACs) and I/O systems. Now using wireless for programmable automation controllers and I/O is as easy as it is for PCs and laptop computers, rather than the hodgepodge of proprietary and incompatible technologies typically found in the industrial automation industry today.

Wireless local area networking (WLAN) capabilities have been added to all of Opto 22's Ethernet-based SNAP PAC System components, including its full line of intelligent SNAP I/O processors ("brains") and all standalone and rack-mounted programmable automation controllers (SNAP PACs). Control system designers can now architect systems with traditional Ethernet wiring, Wi-Fi (also known as wireless Ethernet), or any combination of the two, delivering a new level of networking flexibility not available from any other industrial automation vendor.

"Similar to the way you use your laptop, our SNAP PAC controllers and I/O allow you to choose wired and wireless networking based on your environment and other factors," explains Nick Riley, Design Engineer at Opto 22. "Engineers now have an effective, lower-cost way to provide 'proof-of-concept' for their projects—before investing in costly permanent wiring or building a wireless infrastructure throughout their factory or facility. It also gives them flexible options for segmenting their network."

Opto 22's new wireless technology in the SNAP PAC devices is based upon the industry-standard IEEE-802.11 specification with support for a, b, and g networks operating in the license-free 5 GHz (802.11a) and 2.4 GHz (802.11b/g) frequency bands. In this way the controllers and I/O brains can be used in the most common wireless infrastructures deployed in the world today. Wireless access points, wireless routers, and wireless repeaters from nearly any vendor can co-exist with SNAP PAC wireless technology. The 5 GHz (802.11a) option is particularly significant—and unique in industrial I/O systems—because it allows users to deploy SNAP PAC wireless in a frequency other than the typically crowded 2.4 GHz band, where interference from other 2.4 GHz devices, such as microwave ovens, could reduce performance.

Security is provided via the latest and most secure transmission algorithms—including WPA (TKIP) and WPA2 (802.11i/AES)—to help build the robust and secure wireless communications system typically required for any wireless implementation today. In addition, SNAP PAC wireless supports either *infrastructure* mode, where communication among devices is routed through an access point, or *ad hoc* mode, where each device can detect and communicate with any other similarly configured network device within range.

These wireless capabilities provide numerous benefits to users, beginning with the significant savings achieved through the reduction in wiring and termination costs. Wireless networking also makes it possible to deploy I/O and controllers in remote areas, areas that are inaccessible, or areas where network wiring is difficult or impossible to install.

The wireless capabilities in Opto 22 SNAP PAC I/O and controllers are unique in the automation industry because most other industrial wireless networking solutions are completely separate from a vendor's standard line of components. Users are often required to purchase different or additional components—such as special module carriers or custom wireless I/O modules, racks, and terminations—which in turn requires them to carry a separate inventory of spares and networking gear. In many cases, the full line of a vendor's analog and digital I/O does not support wireless networking. As a result, customers are forced to choose wired or wireless up front, and thus specify and commit to a networking technology in the early stages of project design. Later, if wireless communication doesn't meet needs or expectations—or vice-versa in

the event they wish to wirelessly enable an existing application—they must procure, configure, and install different hardware.

In contrast, Opto 22's SNAP PAC controllers and I/O brains give users both wired and wireless at any time. They can network their components via standard wired Ethernet, use 802.11a/b/g for wireless networking, or use a combination of both. More importantly, Opto 22's full line of SNAP analog, digital, and serial I/O modules is fully supported in both wired and wireless mode—simplifying the specifying of I/O and significantly reducing spares. Also, all the standard industrial protocols currently supported by the existing Ethernet interface are fully supported over wireless as well, including OptoMMP, Modbus®/TCP, ODVA's EtherNet/IP™, FTP, SNMP, SMTP, and more.

Finally, Opto 22's wireless technology offers the faster 802.11a and 802.11g radio technologies (54 Mbps), which differs from competing vendors' products that use 802.11b only (11 Mbps).

Opto 22 has a 10-year history developing products utilizing wireless technologies. In early 2000, the company was the first automation vendor to launch a wireless LAN I/O product. In 2002, the company entered the nascent machine-to-machine (M2M) industry by forging alliances with wireless leaders Nokia, AT&T Wireless, Sony-Ericsson, and others. These efforts resulted in Opto 22 successfully delivering wireless remote monitoring and data acquisition solutions to manufacturing and other industry sectors.

For more information about Opto 22's new wireless technology, and to download the *Overcoming Concerns about Wireless PACs and I/O in Industrial Automation* whitepaper, visit: http://www.opto22.com/ad/wired_wireless_IO.aspx

Availability and pricing for SNAP PACs and SNAP I/O with wireless networking expected in summer 2009.

## About Opto 22

Opto 22 develops and manufactures hardware and software for applications involving industrial automation and control, remote monitoring, and data acquisition. Opto 22 products use standard, commercially available networking and computer technologies and have an established reputation worldwide for ease-of-use, innovation, quality, and reliability. Opto 22

products are used by automation end-users, OEMs, and information technology and operations personnel. The company was founded in 1974 and is privately held in Temecula, California, USA. Opto 22 products are available through a worldwide network of distributors and system integrators. For more information, contact Opto 22 headquarters at +1-951-695-3000 or visit www.opto22.com.