



# 6 Reasons to Consider the SNAP PAC System for Your Next Project

**OPTO 22**  
Automation made simple.

**1 Simple to understand and use**  
The SNAP PAC System™ has just four integrated components: software, controllers, brains, and I/O. Building, debugging, and troubleshooting are far easier with an integrated system, significantly reducing the time and effort it takes to get your system up and running.

**2 Lower capital and long-term costs**  
The SNAP PAC System costs less than many single-purpose PLC systems, and since the software is free, you don't shell out large capital costs just to get started. And with free training and free product support, costs over the lifetime of the system are significantly lower.

**3 One system for many automation projects**  
The SNAP PAC System is multi-disciplinary. You can tackle multiple automation projects with a single system that's well suited for process control, discrete automation, energy management, data acquisition, and even remote monitoring and supervisory control.

With distributed intelligence, it's easy to add I/O where and when you need it. With Wired+Wireless™ controllers and I/O, you can switch from a wired network to a wireless one, or communicate over both at once.

Flexible hardware means you don't waste your investment—in either money or time.

**4 Advanced programming tools**  
The SNAP PAC System can be programmed with intuitive flowcharts or with more advanced scripting—or with a combination of both. Both methods include commands for standard process control and discrete automation functions, plus floating point math, string handling, arrays, subroutines, pointers, and other advanced tools for sophisticated applications.

**5 Connectivity to third-party software and devices**  
SNAP PAC controllers and brains include built-in support for OPC, Modbus®/TCP, and EtherNet/IP™. It's simple to move data to SQL database systems and email directly from the hardware. The system can also easily communicate with devices using serial Modbus, DNP, BACnet, CAN, or virtually any serial-based device or equipment.

**6 The best I/O in the business**  
...backed by the best warranty in the business: most SNAP I/O™ modules are guaranteed *for life*. And all modules are individually tested; we do no statistical testing. A SNAP PAC System can range from a few points of I/O to thousands. You choose the reliable analog, digital, and serial modules you need from a wide array of signal types. Voltage, current, AC, DC, thermocouples, RTDs, power monitoring, RS-232 and RS-485, Profibus®, motion control, strain gauge, and many more—all work with the SNAP PAC System.

## About the SNAP PAC System

The SNAP PAC System is an integrated system of hardware and software from Opto 22 for industrial control, remote monitoring, and data acquisition applications. Designed to simplify the typically complex process of understanding, selecting, buying, and applying an automation system, the SNAP PAC System consists of four integrated components:

**PAC Project™ Software Suite**—easy-to-use flowchart-based control programming, HMI (human-machine interface) development and runtime, and optional OPC server and database connectivity software

**SNAP PAC controllers**—standalone or rack-mounted industrial controllers; Wired+Wireless models available.

**SNAP PAC brains**—intelligent I/O processors for distributed control. Also available in Wired+Wireless models.

**SNAP I/O**—analog, digital, serial, and special-purpose I/O modules for connecting to field devices, machines, and sensors. All I/O modules work interchangeably with standard and Wired+Wireless brains.

These four simple but flexible components form a system capable of handling any application, from basic equipment monitoring to complete factory automation.

## Communication Networks and Protocols

Built-in Ethernet networking comes standard with the SNAP PAC System, so you don't have to worry about the costs and hassles of adding networking communication cards. Distributed I/O within the system can run on Ethernet, serial, or both networks simultaneously. In addition, you can communicate with a myriad of serial devices such as barcode readers, RFID readers, serial displays, and modems.

Because the SNAP PAC System runs on standard Ethernet networks, it communicates natively with company computers and Ethernet-based devices, using standard protocols such as TCP/IP, UDP/IP, SMTP for email, SNMP for network management, Modbus®/TCP, and EtherNet/IP™ for Allen-Bradley® PLC systems.

## For More Information

Visit our website, [www.opto22.com](http://www.opto22.com), for product information, videos, and demonstrations.

- Try PAC Project software for free with the **PAC Project Demo**, <http://www.opto22.com/lp/pacprojectdemo.aspx>
- Click the **Watch** tab for short videos about the SNAP PAC System.
- Click the **Products** tab for product descriptions and specifications.
- For complete information on the SNAP PAC System, see Opto 22 form #1696, the *SNAP PAC System Specification Guide*. (The easiest way to find it is to search on the form number.)

## About Opto 22

Opto 22 develops and manufactures hardware and software products for applications in industrial automation, energy management, remote monitoring, and data acquisition.

Using standard, commercially available Internet, networking, and computer technologies, Opto 22's input/output and control systems allow customers to monitor, control, and acquire data from all of the mechanical, electrical, and electronic assets that are key to their business operations.

Founded in 1974, Opto 22 has an established reputation for innovation, quality, and reliability. The company's products and services support automation end users, OEMs, and information technology and operations personnel in more than 10,000 installations worldwide.

Opto 22 products are sold through an international network of distributors, partners, and system integrators. For more information, contact Opto 22 headquarters at 800-321-OPTO or visit the website at [www.opto22.com](http://www.opto22.com).