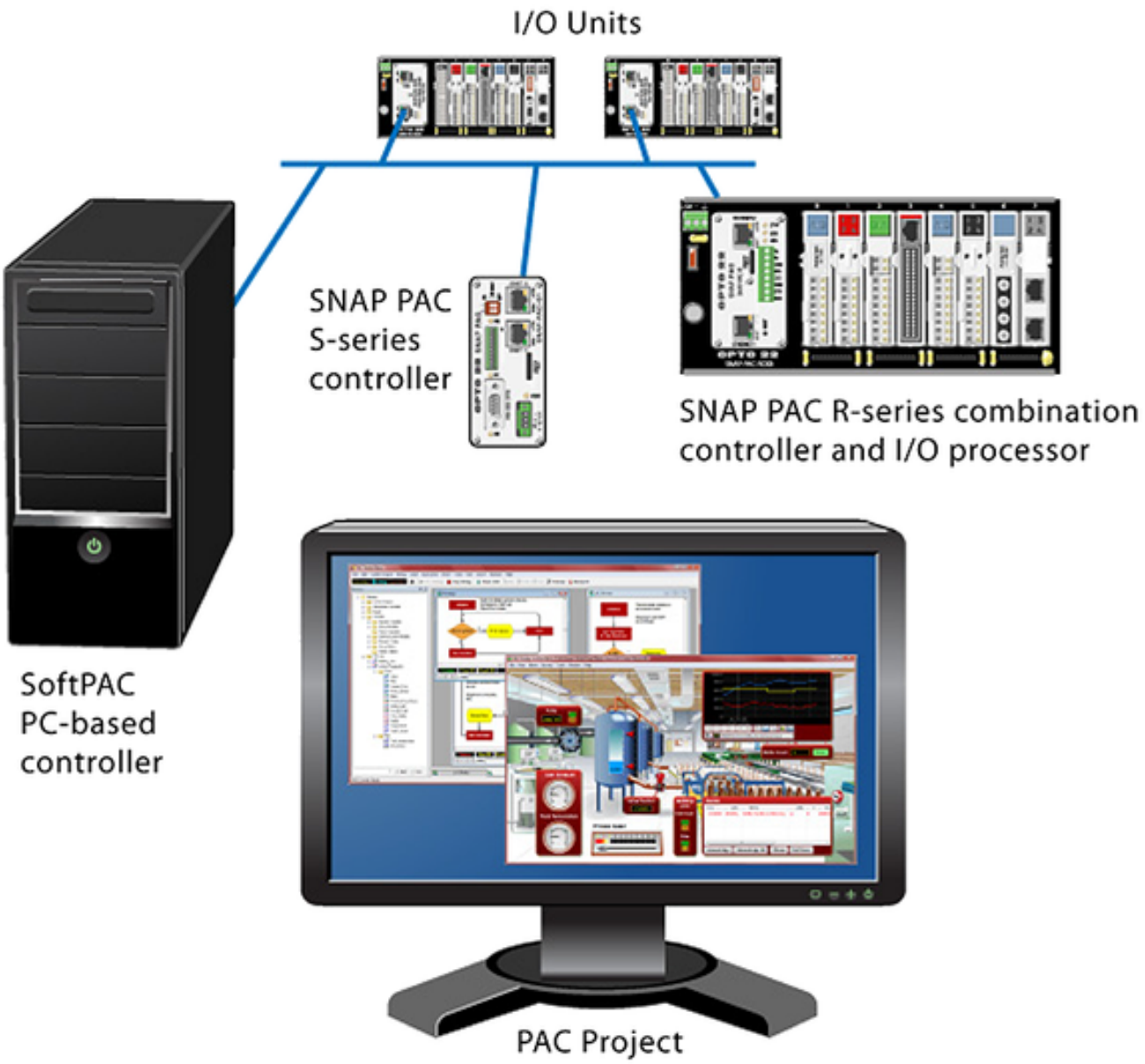
Software-based programmable automation controller ideal for computationally intensive applications



Industrial automation manufacturer Opto 22 has announced SoftPAC(tm), a software-based programmable automation controller (PAC) ideal for use with computationally intensive applications as well as applications that must log, manipulate, and exchange large amounts of data. SoftPAC joins Opto 22's existing SNAP PAC family of standalone and rack-mounted PAC controllers so automation professionals can choose the best PAC-either hardware- or PC-based-for their applications.

SoftPAC takes advantage of a PC's computational speed to quickly execute the

complex logic and calculations that automation professionals encounter. For example, industrial engineers and others working with mathematically demanding applications such as gas density calculations, solar tracking, and encryption can use SoftPAC to improve calculation time and increase overall performance.

As a PC-based controller, SoftPAC also takes advantage of a PC's file handling and networking capabilities to enhance data acquisition and monitoring applications that log, manipulate, and exchange large amounts of data. An engineer in a large refrigerated warehouse, for example, may need to log gigabytes of temperature, power, compressor, and door status data from multiple refrigerators and freezers. While this volume of data can be difficult to handle with a hardware-based controller, PC-based SoftPAC can log the data using the PC's extensive storage and networking capabilities. File operations are limited only by the size of the PC's hard drives and the available network volumes.

As a PC-based controller, SoftPAC can also reduce costs for machine builders and OEMs who integrate a PC into their products. Running SoftPAC on the PC already built into the machine not only avoids the cost of a separate, hardware-based controller but also saves valuable space inside compact machines.

SoftPAC is programmed with the PAC Project(tm) software suite just like Opto 22's standalone (S-series) and rack-mounted (R-series) PACs, and a control program developed for one PAC can be run on another one with almost no modification. Like hardware-based PACs, SoftPAC can be used with any Opto 22 SNAP I/O unit that uses an Ethernet-based I/O processor, or "brain." Hardware-based PACs have a fixed amount of RAM for program memory and logic-16 MB or 32 MB, depending on the model-while SoftPAC, drawing on PC RAM, can provide up to 64 MB RAM.
SoftPAC runs under Microsoft Windows 7 (32-bit or 64-bit) or Windows XP (32-bit) operating systems and supports operation on multiple cores and processors.

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