

OPTOOPCSERVER DATA SHEET

Features

- > OPC-DA 2.0-compliant
- > Monitors, configures, and controls SNAP PAC controllers and brains as well as Opto 22 legacy devices
- > Provides fast, efficient handling of communications between multiple OPC clients and Opto 22 devices

DESCRIPTION

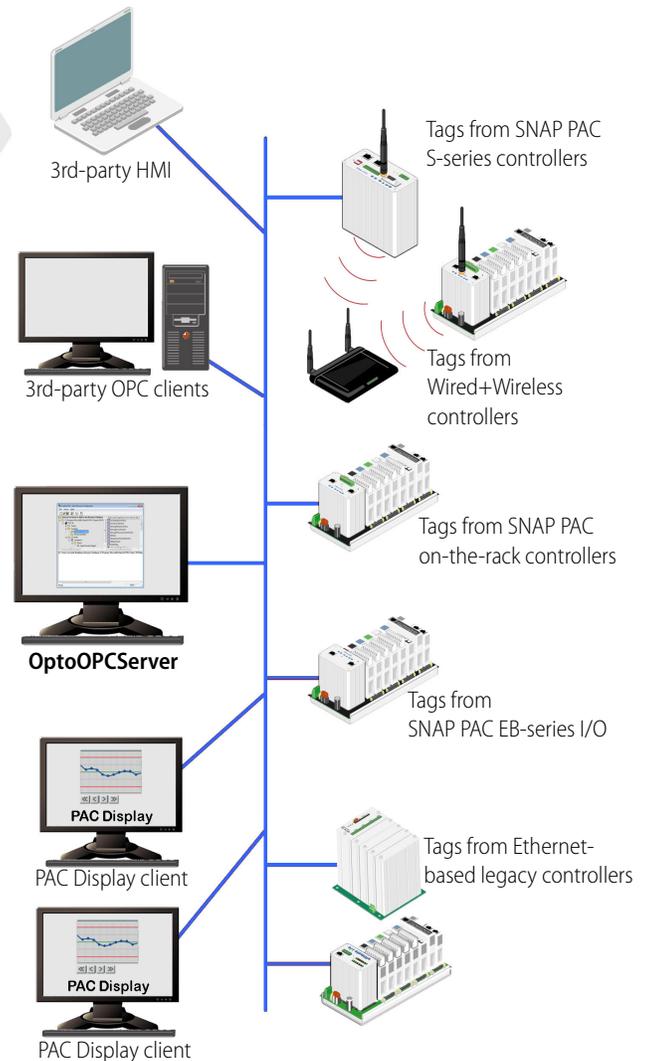
OptoOPCServer™, part of the PAC Project™ software suite, is an OPC-DA 2.0-compliant server that connects your OPC client software with Opto 22's *groov* EPIC and SNAP PAC systems, and legacy controllers and I/O units. Through OptoOPCServer, your HMI and SCADA applications can monitor, configure, and control these Opto 22 systems:

- *groov* EPIC processors
- SNAP PAC S-series standalone controllers
- SNAP PAC R-series on-the-rack controllers
- SNAP PAC EB-series brains*
- SNAP PAC SB-series brains* connected to SNAP PAC S-series controllers
- Ethernet-based legacy controllers and I/O units, such as the SNAP-LCE and SNAP Ultimate, SNAP Ethernet, and SNAP Simple I/O, as well as Ethernet-based FactoryFloor™ *mistic* controllers, such as the SNAP-LCM4*, M4*, M4RTU8, and M4IO* (M4SENET-100 Ethernet adapter card required).

* **NOTE:** SNAP PAC EB-series brains, SNAP PAC SB-series brains, SNAP-LCM4*, M4*, M4RTU8, and M4IO are Obsolete.

OptoOPCServer is designed for fast, efficient handling of communications between multiple OPC clients and Opto 22 devices. Because OptoOPCServer uses a report-by-exception method of communicating with clients, network traffic on industrial automation and manufacturing networks is kept to a minimum. On the client side, OptoOPCServer consolidates tasks from multiple OPC clients, recognizing identical requests and avoiding duplication.

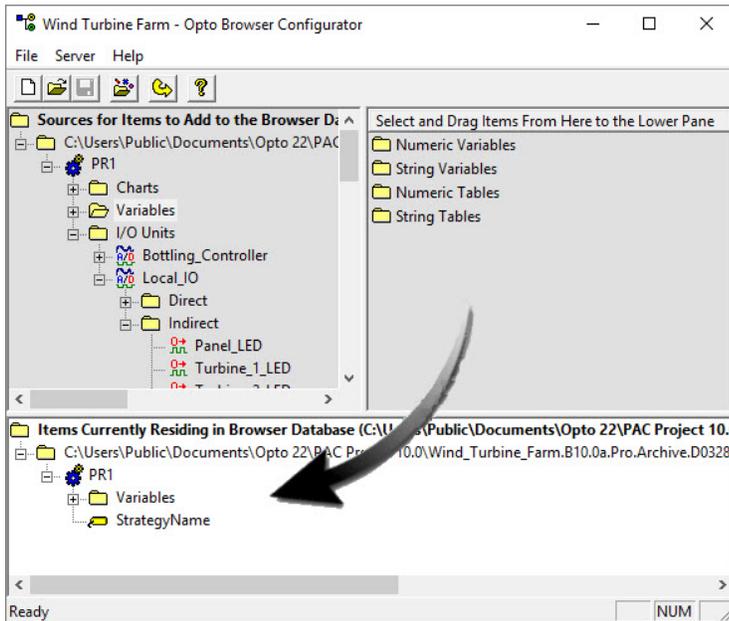
OptoOPCServer is strongly recommended for multiple seats of PAC Display™. It is the critical component for scaling up a PAC Display monitoring system for optimum performance.



System Architecture

Part Numbers

Part	Description
OPTOOPCSERVER	OptoOPCServer software and documentation on CD, plus printed documentation



Opto Browser Configurator provides an intuitive drag-and-drop interface for building OPC browser databases from Opto 22 control and configuration files.

OptoOPCServer includes these software components:

- Opto Browser Configurator, an easy-to-use application that creates an OPC browser database from Opto 22 PAC Control strategies, ioControl and OptoControl strategies, and I/O unit configuration files
- OptoOPCServer, which runs on a workstation or dedicated network server
- OptoOPCServer debug monitor, for viewing the activity between OPC clients, OptoOPCServer, and Opto 22 devices.

REQUIREMENTS

To use OptoOPCServer with your PC, you must have:

- A computer with at least the minimum processor and memory required for your version of Microsoft® Windows®, and Ethernet capability. Additional memory and a better CPU may be required for some configurations. We recommend staying away from low-end CPUs and using one of the following operating systems:
 - Microsoft® Windows® 10 Professional (32-bit or 64-bit) or Windows 11 Professional
 - (OptoOPCServer and OptoDataLink) Windows Server® 2012 R2, 2016, 2019, and 2022; however, you must install .NET Framework 4.0 prior to installing PAC Project on these operating systems

NOTE: PAC Project cannot be installed on Windows XP or older Windows operating systems. Other versions of Windows operating

systems and embedded Windows operating systems are not supported.

- Ethernet capability
- VGA or higher resolution monitor. Minimum size: 800x600 with small fonts
- Mouse or other pointing device
- (Optional) Installed Windows printer
- If your PAC Display Pro project accesses an M4-series controller (such as a SNAP-LCM4 or M4RTU) via an Ethernet connection, controller firmware version R4.1a or newer is required. In addition, in order to access strings or string tables, controller firmware R4.1d or newer is required.
- At least 19 MB of available hard drive space.

HOW TO OBTAIN OPTOOPCSERVER

Purchase OptoOPCServer either separately or as part of the complete PAC Project Professional software suite. You can [download OptoOPCServer](#) from our website at www.opto22.com.

PRODUCTS

Opto 22 develops and manufactures reliable, easy-to-use, open standards-based hardware and software products. Industrial automation, process control, remote monitoring, data acquisition, and industrial internet of things (IIoT) applications worldwide all rely on Opto 22.

groov RIO®

groov RIO edge I/O offers a single, compact, PoE-powered industrial package with web-based configuration and IIoT software built in, support for multiple OT and IT protocols, and security features like a device firewall, data encryption, and user account control.

Standing alone, groov RIO connects to sensors, equipment, and legacy systems, collecting and securely publishing data from field to cloud. Choose a universal I/O model with thousands of possible field I/O configurations, with or without Ignition from Inductive Automation®, or a RIO EMU energy monitoring unit that reports 64 energy data values from 3-phase loads up to 600 VAC, Delta or Wye.

You can also use groov RIO with a Modbus/TCP master or as remote I/O for a groov EPIC system.

groov EPIC® System

Opto 22's groov Edge Programmable Industrial Controller (EPIC) system gives you industrially hardened control with a flexible Linux®-based processor with gateway functions, guaranteed-for-life I/O, and software for your automation and IIoT applications.

groov EPIC Processor

The heart of the system is the groov EPIC processor. It handles a wide range of digital, analog, and serial functions for data collection, remote monitoring, process control, and discrete and hybrid manufacturing.

In addition, the EPIC provides secure data communications among physical assets, control systems, software applications, and online services, both on premises and in the cloud. No industrial PC needed.

Configuring and troubleshooting I/O and networking is easier with the EPIC's integrated high-resolution color touchscreen. Authorized users can manage the system locally on the touchscreen, on a monitor connected via the HDMI or USB ports, or on a PC or mobile device with a web browser.

groov EPIC I/O

groov I/O connects locally to sensors and equipment. Modules have a spring-clamp terminal strip, integrated wireway, swing-away cover, and LEDs indicating module health and discrete channel status. groov I/O is hot swappable, UL Hazardous Locations approved, and ATEX compliant.

groov EPIC Software

The groov EPIC processor comes ready to run the software you need:

- Programming: Choose flowchart-based PAC Control, CODESYS Development System for IEC61131-3 compliant programs, or secure shell access (SSH) to the Linux OS for custom applications
- Node-RED for creating simple IIoT logic flows from pre-built nodes
- Efficient MQTT data communications with string or Sparkplug data formats
- Multiple OPC UA server options
- HMI: groov View to build your own HMI viewable on touchscreen, PCs, and mobile devices; PAC Display for a

Windows HMI; Node-RED dashboard UI

- Ignition or Ignition Edge® from Inductive Automation (requires license purchase) with OPC-UA drivers to Allen-Bradley®, Siemens®, and other control systems, and MQTT communications

Older products

From solid state relays, to world-famous G4 and SNAP I/O, to SNAP PAC controllers, older Opto 22 products are still supported and working hard at thousands of installations worldwide. You can count on us for the reliability and service you expect, now and in the future.

QUALITY

Founded in 1974, Opto 22 has established a worldwide reputation for high-quality products. All are made in the U.S.A. at our manufacturing facility in Temecula, California.

Because we test each product twice before it leaves our factory rather than testing a sample of each batch, we can afford to guarantee most solid-state relays and optically isolated I/O modules for life.

FREE PRODUCT SUPPORT

Opto 22's California-based Product Support Group offers free technical support for Opto 22 products from engineers with decades of training and experience. Support is available in English and Spanish by phone or email, Monday–Friday, 7 a.m. to 5 p.m. PST.

Support is always available on our website, including [free online training](#) at OptoU, how-to [videos](#), [user's guides](#), the Opto 22 KnowledgeBase, and [OptoForums](#).

PURCHASING OPTO 22 PRODUCTS

Opto 22 products are sold directly and through a worldwide network of distributors, partners, and system integrators. For more information, contact Opto 22 headquarters at **800-321-6786** (toll-free in the U.S. and Canada) or **+1-951-695-3000**, or visit our website at www.opto22.com.

