Since its founding in 1974, Opto 22 has been a pioneer in the development of the solid state relays (SSRs) that enable communication between machinery and computer networks.

To this day, Opto 22 still sets the world standard for solid state relay quality and reliability.

Opto 22 offers a complete line of solid-state relays, from the rugged 120/240-volt AC Series to the small footprint MP Series, designed for mounting on printed circuit boards. All Opto 22 relays feature 4,000 volt optical isolation and are UL recognized. Most are CSA recognized.

The innovative use of room temperature liquid epoxy encapsulation, coupled with Opto 22's unique heat-spreader technology, are key to mass-producing what are generally regarded as the world's most reliable solid-state relays.

Every Opto 22 solid-state relay is subjected to full load test and six times the rated current surge before and after encapsulation. This double testing of every part before it leaves the factory means you can rely on Opto 22 solid-state relays and enables us to guarantee all Opto 22 SSRs for life.

POWER SERIES SOLID-STATE RELAYS

Opto 22 provides a full range of Power Series relays with a wide variety of voltage (110–575 volts) and current options (3–45 amps). All Power Series relays feature 4,000 volts of optical isolation, and have a high PRV rating.

DC Series

The DC Series delivers isolated DC control to large OEM customers worldwide.

The DC Series is also available with LEDs that indicate when a control signal is applied.

These LED input status indicators make it much easier for users to maintain and troubleshoot their control systems.

Also, in response to the European Union's directive on the Restriction of Hazardous Substances (RoHS), these relays have been tested, certified, and stamped as RoHS-compliant.

AC Series

The AC Series offers the ultimate in solid-state reliability. All AC Power Series relays feature a built-in snubber and zero voltage turn on. Transient-proof models offer self-protection for noisy electrical environments.

Z SERIES SSRs

The Z Series employs a unique heat transfer system that makes it possible for Opto 22 to deliver a low-cost, 10-amp, solid-state relay in an all-plastic case.

The push-on tool-free quick-connect terminals make the Z Series ideal for high-volume OEM applications.

HS SERIES SSRs

The HS Series features an integrated heatsink, so heat dissipates more easily than in a standard SSR mounted to the same heatsink.

With the heatsink built-in, you don't have to select one from a catalog, and installation is much easier.

PRINTED CIRCUIT SERIES SSRs

Opto 22's Printed Circuit Series allows OEMs to easily deploy solid-state relays on printed circuit boards. Two unique packages are available, both of which will switch loads up to four amps.

MP Series

The MP Series packaging is designed with a minimum footprint to allow maximum relay density on the printed circuit board.

P Series

The P Series power relays provide low-profile for 0.5-inch (12.7 mm) center mounting on printed circuit boards.

MADE IN THE
USA

More about Opto 22

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 even write an IEC 61131-3 compliant control program to run on groov RIO, using CODESYS. 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.