

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 and 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

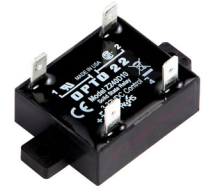
The AC Series offers the ultimate in solid-state reliability. All AC Power Series relays feature a built-in snubber and zero voltage turn on. Transient-proof models offer self-protection for noisy electrical environments.



### 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.

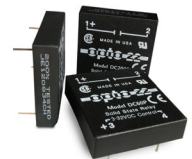
### MP Series

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.



## PRODUCTS

Opto 22 develops and manufactures reliable, easy-to-use, open standards-based hardware and software products.

Industrial automation, process control, building automation, industrial refrigeration, remote monitoring, data acquisition, and industrial internet of things (IIoT) applications worldwide all rely on Opto 22.

### groov EPIC® System

Opto 22's *groov* Edge Programmable Industrial Controller (EPIC) system is the culmination of over 40 years of experience in designing products for the automation industry.

*groov* EPIC gives you an industrially hardened system with guaranteed-for-life I/O, a flexible Linux®-based processor with gateway functions, and software that meets the needs of your automation and IIoT applications.

### groov EPIC I/O

I/O provides the local connection to sensors and equipment. *groov* I/O offers up to 24 channels on each I/O module, with a spring-clamp terminal strip, integrated wireway, swing-away cover, and LEDs indicating module health and digital channel status.

*groov* I/O is hot swappable, UL Hazardous Locations approved, and ATEX compliant. Opto 22 I/O is so reliable, we guarantee it for life.

### 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, online services, and more, both on premises and in the cloud.

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 or on a monitor connected via the HDMI or USB ports.

### groov EPIC Software

Software included in the *groov* EPIC controller:

- PAC Control engine to run PAC Control strategies and PAC Display projects
- CODESYS Runtime engine to run IEC61131-3 compliant programs built with CODESYS Development System

Optional access to the Linux operating system through a secure shell (SSH) to download and run custom applications

*groov* View for building your own device-independent HMI, viewable on the touchscreen, PCs, and mobile devices.

Node-RED for creating simple logic flows from pre-built nodes  
Ignition Edge® from Inductive Automation®, with OPC-UA drivers to Allen-Bradley®, Siemens®, and other control systems, and MQTT/Sparkplug communications for efficient IIoT data transfer

### Older products

From solid state relays (our first products) to world-famous G4 and SNAP I/O, to SNAP PAC controllers, older Opto 22 products are still supported and still doing the job at thousands of installations worldwide. You can count on us to give you 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.

