

This product is obsolete.

# OPTO 22

## DATA SHEET

Form 1200-230228

# INTERFACES CLASSIC PC

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### Description

**\*\* This product is obsolete and no longer available. \*\***

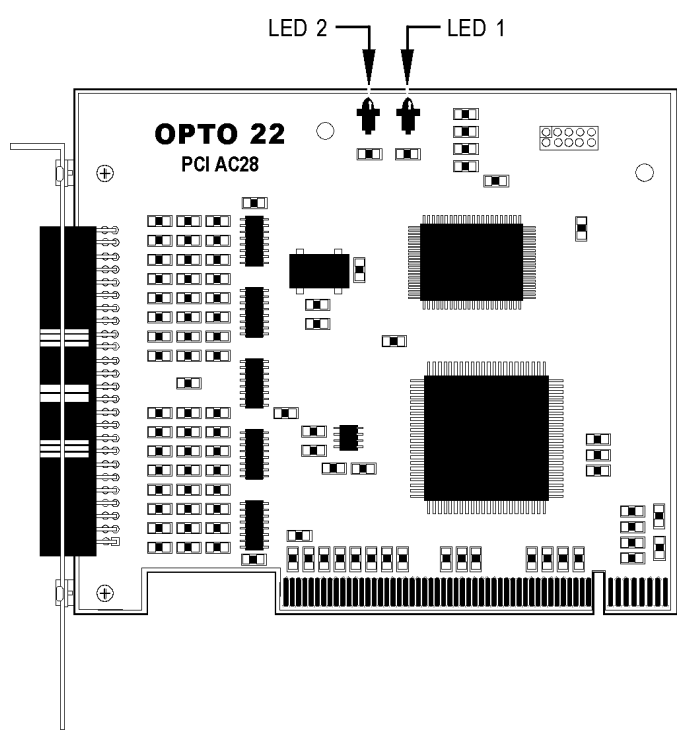
The PCI-AC28 is a high-speed adapter card designed to link the Pamux® bus to PCI-compatible computers. The PCI-AC28 is compatible with computers that feature a standard 33 MHz PCI bus. It is ideal for customers who have been using Opto 22's AC28 adapter card but must upgrade to a newer PC that uses the PCI rather than the ISA bus.

Each PCI-AC28 can access up to 512 points of I/O along a Pamux bus of up to 500 feet in length. Up to 32 PCI-AC28s can be installed in one PC, supporting up to 16,384 points of I/O. The PCI-AC28 includes a 50-pin male header connector and is compatible with HH-series flat-ribbon cable. The card requires 5 VDC @ 600 mA and operates at temperatures of 0° to 70° C. Configuration is jumperless, and two LEDs on the card indicate bus operation or user application status.

Free with the PCI-AC28 adapter card is the PCI Pamux Toolkit, included on the Opto 22 Adapter Card Toolkits CD, which is shipped with the card. The toolkit is also available on our Web site at [www.opto22.com/products/softdevkits.asp](http://www.opto22.com/products/softdevkits.asp). This developer toolkit includes sample applications, utility applications, and the PCI Pamux driver, which eliminates the need for separate driver programming. The PCI Pamux driver works with Microsoft® Windows® 95, Windows 98, Windows Me, Windows 2000, and Windows NT®. The driver is a dynamically linked library (DLL) that provides a set of functions that can be used with Microsoft Visual Basic® or Microsoft C++®.

For details on installing and using the PCI-AC28 and its PCI Pamux driver, see Opto 22 form #1195, *PCI-AC28 User's Guide*.

Part Number	Description
PCI-AC28	PCI bus to Pamux bus adapter card
ADAPTERCARDTOOLKITCD	PCI Pamux Developer Toolkit



### Specifications [Obsolete]

Power requirements	5 VDC @ 600 mA
Toolkit compatibility	32-bit, 33 MHz PCI bus, Microsoft Windows 95/98/Me, Windows NT/2000
PCI compliance	PCI Specification Revision 2.1
Opto 22 brain compatibility	B4, B5, B6, SNAP-B4, SNAP-B6
Jumpers	None; PCI configured
LEDs	Two

## 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](http://www.opto22.com).

