I/O MODULE
G4 DIGITAL
DC OUTPUT

OPTO 22

DATA SHEET

Form 254-011127

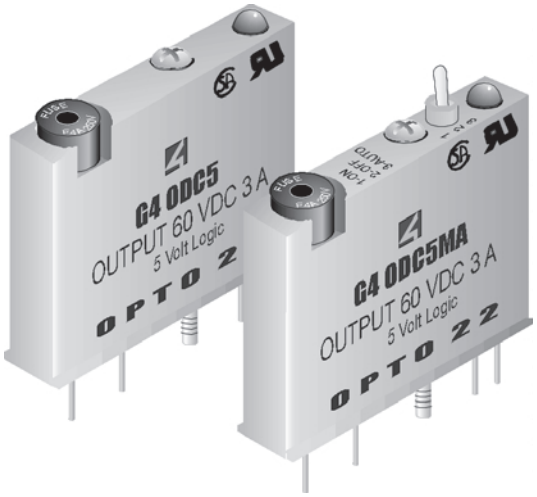
Part Number	Description
G4ODC5	G4 DC Output 5-60 VDC, 5 VDC Logic
G4ODC5A	G4 DC Output 5-200 VDC, 5 VDC Logic
G4ODC5MA	G4 DC Output 5-60 VDC, 5 VDC Logic With Manual/Auto Switch
G4ODC15	G4 DC Output 5-60 VDC, 15 VDC Logic
G4ODC24	G4 DC Output 5-60 VDC, 24 VDC Logic
G4ODC24A	G4 DC Output 5-200 VDC, 24 VDC Logic

Description

Opto 22's G4 DC output modules are used to control or switch DC loads. Each module provides up to 4,000 V_{rms} of optical-isolation between field devices and control logic.

The G4ODC5MA is a special module featuring a manual-on/manual-off/automatic switch, ideal for diagnostic testing of control applications.

Typical applications for DC output modules include switching loads such as DC relays, solenoids, motor starters, lamps, and indicators.



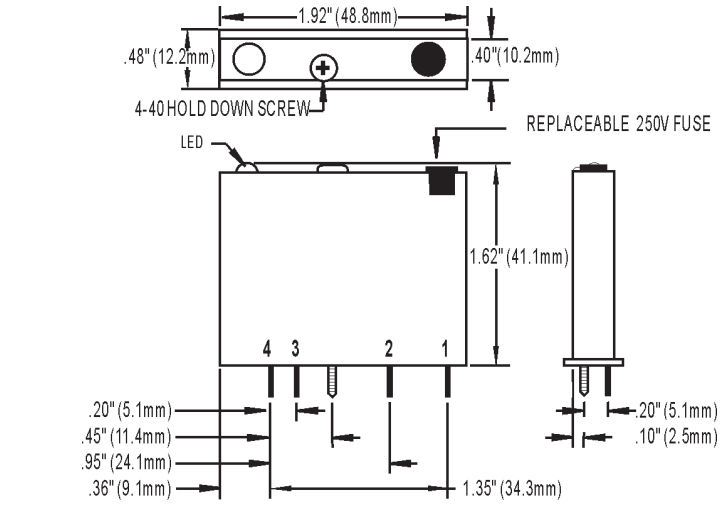
Features

- 4,000 V_{rms} optical-isolation
- Built-in LED status indicator
- Logic levels of 5, 15, and 24 VDC
- Removable fuse
- Ability to withstand one-second surge of 5 amps
- Operating temperature: -30° C to 70° C
- UL recognized, CSA certified, CE approved
- Passes NEMA Showering Arc Test (ICS 2-230)
- Meets IEEE Surge Withstand Specification (IEEE-472)

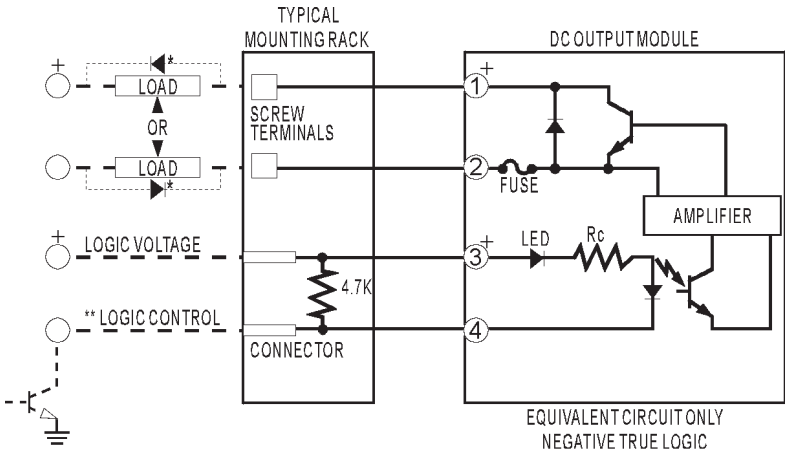
Specifications

	Units	G4ODC5*	G4ODC5A*	G4ODC5MA*	G4ODC15	G4ODC24	G4ODC24A
Maximum Line Voltage	VDC	60	200	60	60	60	200
Output Voltage Range	VDC	5-60	5-200	5-60	5-60	5-60	5-200
Key Feature		---	---	Diagnostic switch	---	---	---
Current Rating:	A A	3 2	1 0.55	3 2	3 2	3 2	1 0.55
Isolation Input-to-output	V_{rms}	4,000	4,000	4,000	4,000	4,000	4,000
Off-state Leakage at Maximum Voltage	mA	1	2	1	1	1	2
Control Resistance (Rc in schematic)	Ohm	220	220	220	1K	2.2K	2.2K
One-second Surge	A	5	5	5	5	5	5
Turn-on Time	µs	50	100	50	50	50	100
Turn-off Time	µs	50	750	50	50	50	750
Output Voltage Drop Maximum Peak	V	1.6	1.6	1.6	1.6	1.6	1.6
Nominal Logic Voltage	VDC	5	5	5	15	24	24
Logic Voltage Range	VDC	4-8	4-8	4-8	10.5-16	19.5-32	19.5-32
Logic Pickup Voltage	VDC	4	4	4	10.5	19.5	19.5
Logic Dropout Voltage	VDC	1	1	1	1	1	1
Logic Input Current at Nominal Logic Voltage	mA	12	12	12	15	18	18
Temperature:	°C °C	-30 to +70 -30 to +85	-30 to +70 -30 to +85	-30 to +70 -30 to +85	-30 to +70 -30 to +85	-30 to +70 -30 to +85	-30 to +70 -30 to +85

Dimensions



Schematics



* Commutation diode must be used on inductive loads. Typically, use diode IN4005.
** Control line is compatible with totem pole or tri-state output device.

More About OPTO 22

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Products

Opto 22 produces a broad array of reliable, flexible hardware and software for industrial automation and remote monitoring. Opto 22's diverse and complete product range allows you to buy in at any level, from solid-state relays to fully integrated control systems.

SNAP Ultimate I/O™

The most intelligent and powerful I/O system available, SNAP Ultimate I/O effectively combines I/O, control, networking, and enterprise connectivity into a single cohesive system.

SNAP Ultimate I/O has the ability to communicate *directly* with enterprise systems, eliminating the need for complex middleware and the significant investments associated with it. Software and utilities for use with SNAP Ultimate I/O include ioControl™ flowchart-based control programming software and ioDisplay™, a Windows-based HMI development package.

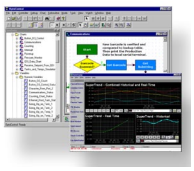
SNAP Ethernet I/O™

Using SNAP Ethernet I/O systems, you can connect a wide variety of electronic and mechanical devices such as lights, temperature and pressure sensors, motors, and serial devices to computers via a standard Ethernet network, wireless LAN, or even the Internet.

SNAP-IT™ Systems

A packaged solution that brings industry-proven SNAP Ethernet technology to your enterprise faster and easier than ever before, SNAP-IT is a Web-enabled hardware appliance that connects environmental, device, and other sensors directly to your enterprise applications. The connected devices can then be controlled and real-time operational data can be collected, monitored, and delivered via a standard Ethernet, wireless LAN, or dial-up network.

Opto 22 FactoryFloor™ Software



FactoryFloor is an integrated suite of industrial control software applications designed to help you develop control automation solutions, build easy-to-use operator interfaces, and expand your manufacturing systems' connectivity.

Other Software and Hardware

Software developer kits (SDKs), diagnostic utilities, support for the Linux operating system, and a full line of SNAP industrial controllers are also available from Opto 22.

Quality

In delivering hardware and software solutions for worldwide device management and control, Opto 22 retains the highest commitment to quality.

We do no statistical testing; each product is made in the U.S.A. and is tested twice before leaving our 160,000 square-foot manufacturing facility in Temecula, California. That's why we can guarantee solid-state relays and all optically-isolated I/O modules *for life*.

Product Support

Opto 22's Product Support Group offers comprehensive technical support for Opto 22 products. The staff of support engineers represents years of training and experience, and can assist with a variety of project implementation questions. Product support is available in English and Spanish from Monday through Friday, 8 a.m. to 5 p.m. Pacific Standard Time.

Opto 22 Web Sites

www.opto22.com
www.ManageTheRealWorld.com
www.internetio.com (live Internet I/O demo)
www.ultimateio.com (SNAP Ultimate I/O information)

Other Resources

- OptoInfo CDs
- Integration support
- Ongoing, up-to-date training
- FaxBack service: (800) 474-OPTO

About Opto 22

Founded in 1974, Opto 22 is a leading manufacturer of high-quality hardware and software solutions for connecting real-world devices with computer networks. Customer applications include enterprise management, remote monitoring and control, industrial automation, and data acquisition. Opto 22 was one of the first companies to recognize and implement solutions involving networks, computers, and real-world equipment and devices. More than 65 million devices worldwide are reliably connected to Opto 22 systems.

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