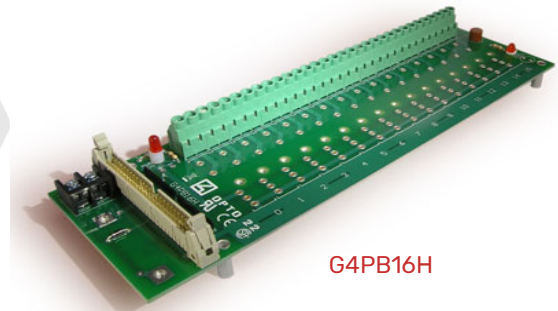


## G4 DIGITAL I/O MOUNTING RACKS (HEADER CONNECTOR)

### Features

- > Available in 16- and 8-channel models
- > Require minimum panel space
- > Built-in fuse tester
- > Spare 1 A fuse on board; can accept 5A fuse
- > Power indicator LED
- > UL recognized; CSA certified; CE, RoHS, and DFARS approved
- > For field power, use a single 5, 15, or 24 VDC power supply



G4PB16H

### DESCRIPTION

The G4PB16H and G4PB8H Digital I/O Mounting Racks are designed for use with G4 digital I/O modules. The G4PB8H accepts up to 8 digital I/O modules, and the G4PB16H accepts 16.

Both racks work with Opto 22's PBSA, PBSB, and PBSC power supplies.

Logic supply is fused with a 1 A fuse, which, if desired, can be swapped out for a 5 A fuse (sold separately).

Barrier strips with screw terminals provide the field and mounting rack power connections. I/O modules are secured to the mounting rack with a threaded captive hold-down screw. You can insert and remove modules easily and quickly without disturbing field wiring.

For logic connections, the header connector accommodates the following devices:

- Standard 50-pin cable
- Optomux<sup>®</sup> E1 brain board
- Optomux B1 brain board
- Pamux<sup>®</sup> B5 brain board
- *mistic*<sup>™</sup> B100 brain board
- Digital I/O Carrier Board for Raspberry Pi<sup>®</sup> (part number OPTO-P1-40P)

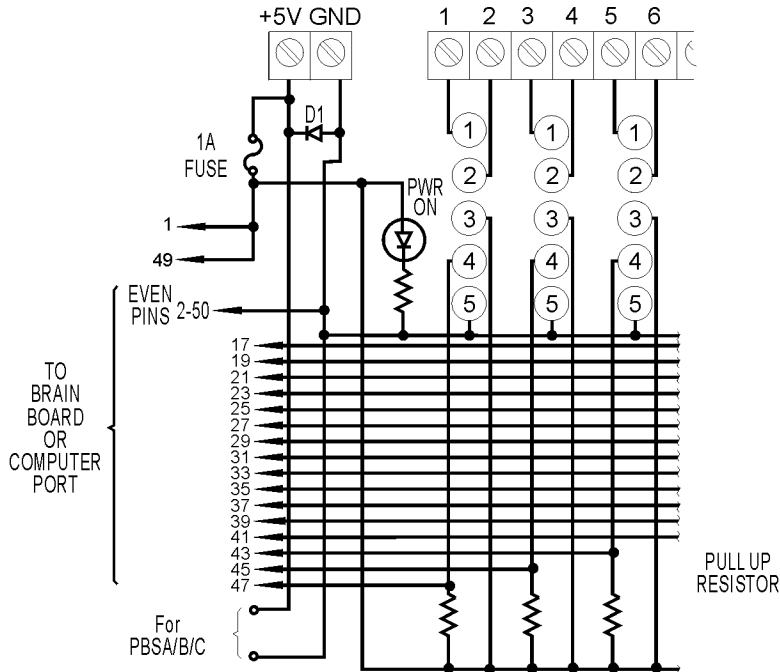
### SPECIFICATIONS

<b>Interface Connectors</b>	
Field	Screw-type barrier strip accommodates up to 10 AWG wire
Control	50-conductor header connector
Power	Two-position screw terminal (used with a 5.00 VDC +0.1 power source) or Opto 22 PBSA/B/C Power Supply
Operating Temperature	0 to 70 °C
Relative Humidity	95% humidity, non-condensing
Agency Approvals	UL recognized; CSA approved; compliant with CE, RoHS, DFARS
Warranty	30 months from date of manufacture

### Part Numbers

Part	Description
G4PB16H	G4 16-Channel Mounting Rack with Header Connector
G4PB8H	G4 8-Channel Mounting Rack with Header Connector

## G4PB16H CONNECTIONS

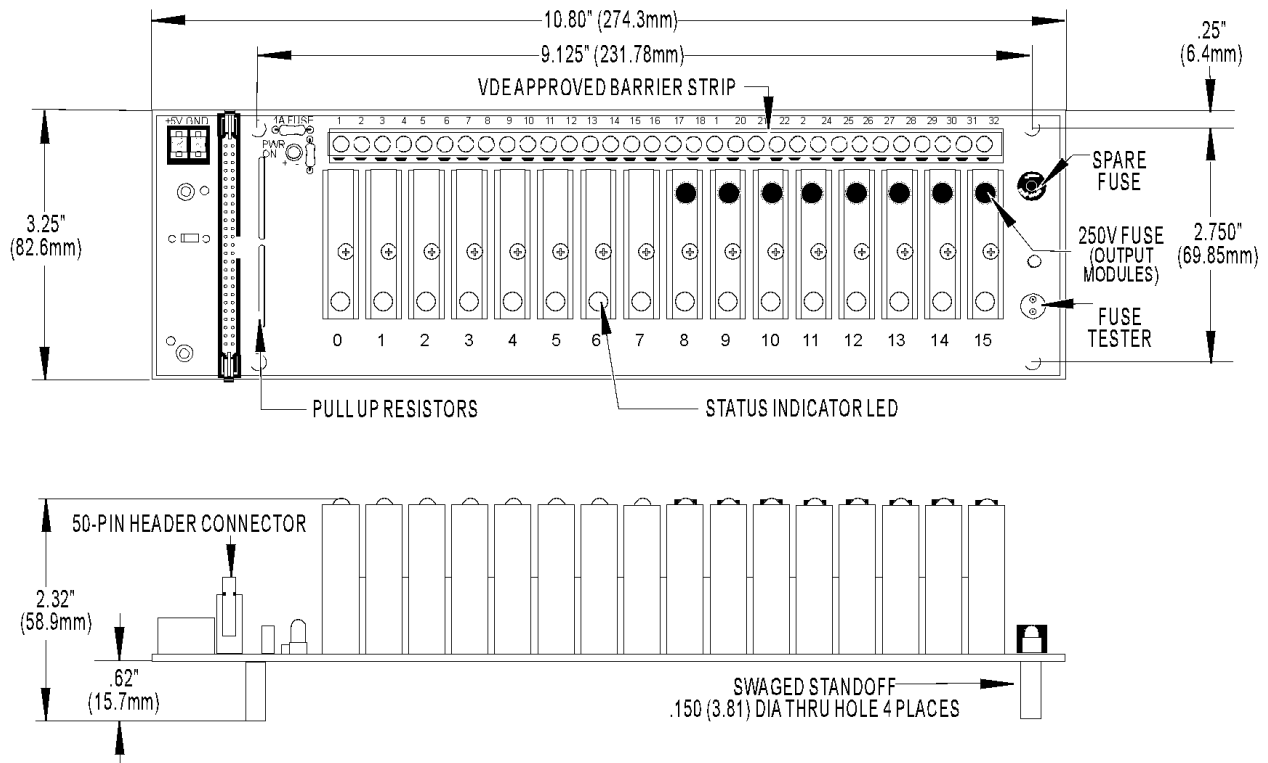


Module Position	Control (Header Connector)	Field (Terminal Strip)
0	47	1 and 2
1	45	3 and 4
2	43	5 and 6
3	41	7 and 8
4	39	9 and 10
5	37	11 and 12
6	35	13 and 14
7	33	15 and 16
8	31	17 and 18
9	29	19 and 20
10	27	21 and 22
11	25	23 and 24
12	23	25 and 26
13	21	27 and 28
14	19	29 and 30
15	17	31 and 32

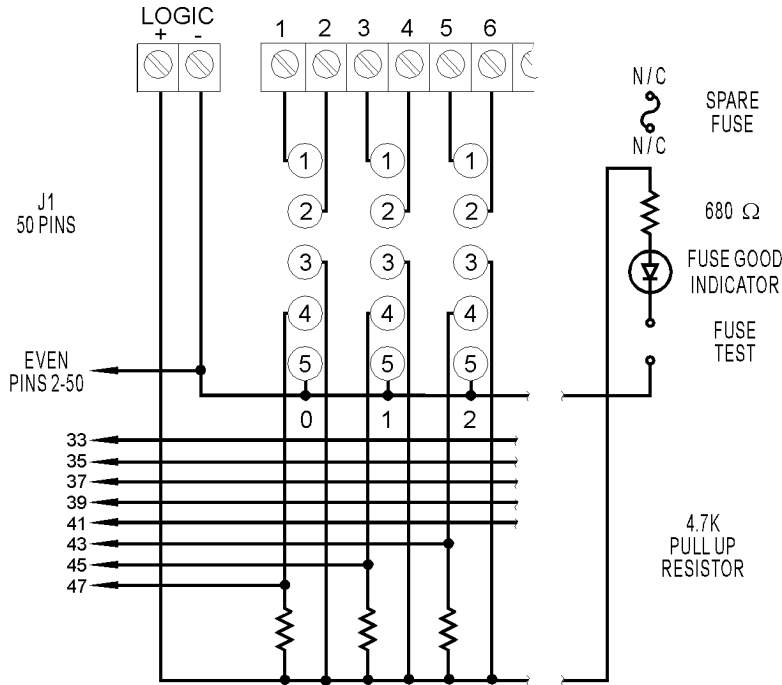
Notes:

1. Even pins on control connector are connected by etch to common.
2. +VCC and return connected to terminals marked +5V and GND.
3. At each module position on the field terminal strip, the lower number is always connected to pin 1 of the I/O module.
4. Use only 5 VDC logic modules when using the mounting rack with a brain board.

## G4PB16H DIMENSIONS



## G4PB8H CONNECTIONS

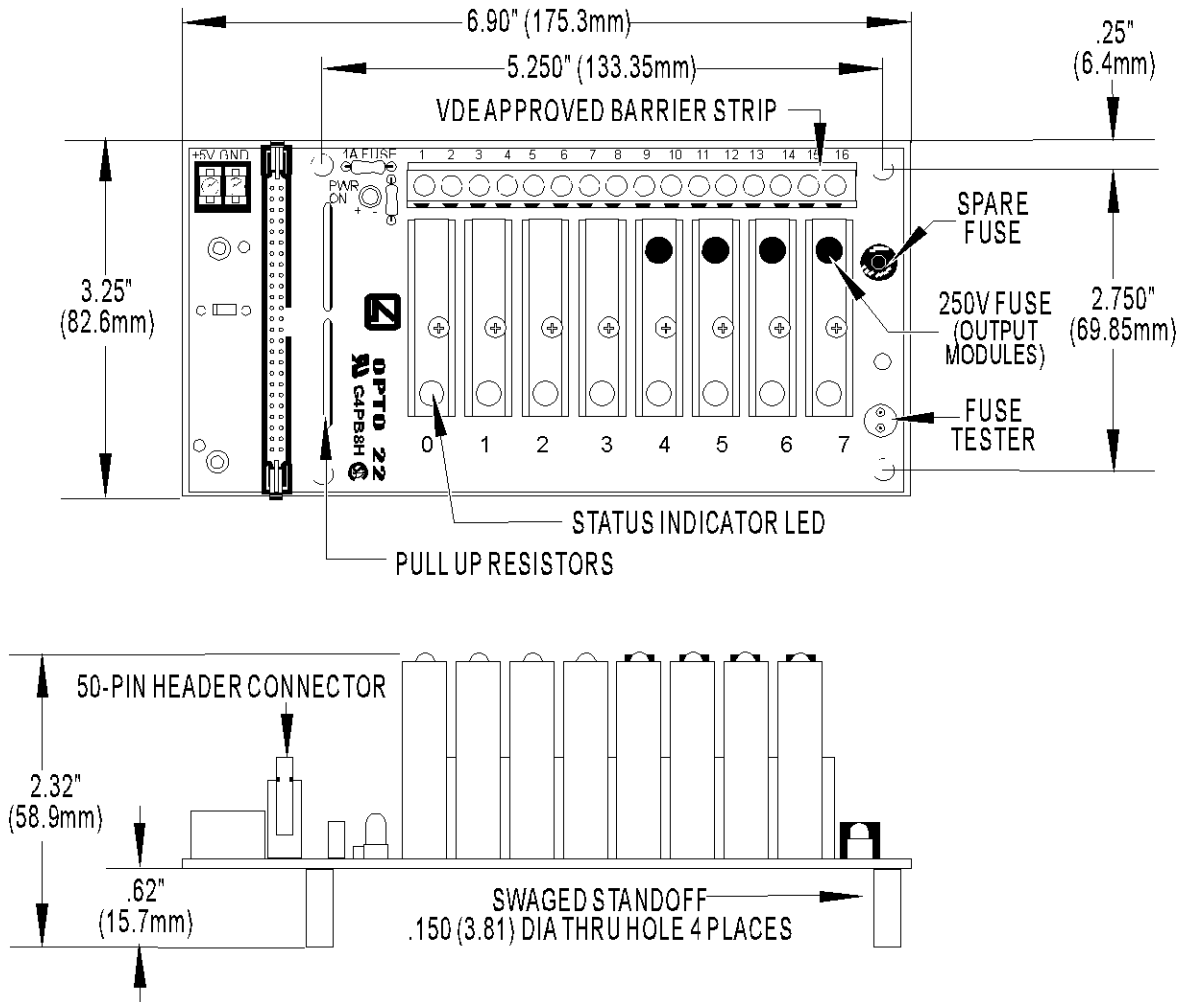


Module Position	Control (Header Connector)	Field (Terminal Strip)
0	47	1 and 2
1	45	3 and 4
2	43	5 and 6
3	41	7 and 8
4	39	9 and 10
5	37	11 and 12
6	35	13 and 14
7	33	15 and 16

Notes:

1. Even pins on control connector are connected by etch to common.
2. +VCC and return connected to terminals marked +5V and GND.
3. At each module position on the field terminal strip, the lower number is always connected to pin 1 of the I/O module.
4. Use only 5 VDC logic modules when using the mounting rack with a brain board.

## G4PB8H DIMENSIONS



## 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 controller with gateway functions, and software for your IIoT application or any application.

### 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, and swing-away cover.

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

### groov EPIC Controller

The heart of the system is the *groov* EPIC controller. 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 touchscreen. Authorized users can see your *groov* View HMI locally on the touchscreen or on a monitor connected via the HDMI or USB ports.

### groov EPIC Software

Software includes:

- Flowchart-based PAC Control for control programming, or build your own custom application with optional secure shell access
- *groov* View for building and viewing your own device-independent HMI
- 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

### groov Edge Appliance

Visualization, data handling, and connectivity in a compact, industrial box: that's the *groov* Edge Appliance. Included are:

- *groov* View for building and viewing operator interfaces on PCs and mobile
- Node-RED for building simple logic flows
- Ignition Edge from Inductive Automation, for OPC-UA drivers and MQTT/Sparkplug IIoT communications



### Older products

From solid state relays (our first products) to world-famous G4 and SNAP I/O, to SNAP PAC controllers, Opto 22 products last a long time. You can count on us to give you the reliability and service you expect.



## 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 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, comprehensive 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 how-to videos, user's guides, the Opto 22 KnowledgeBase, troubleshooting tips, and OptoForums. In addition, free hands-on training is available at our Temecula, California headquarters, and you can [register online](#).

## 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).