# G4 32-channel Digital I/O Mounting Rack

# Features

- **Mathebasis** Requires minimum panel space
- Nuilt-in fuse tester
- Y Spare fuse on board
- UL recognized and CSA certified
- Power indicator light

# Description

The G4PB32H I/O mounting rack can accommodate up to 32 Generation 4 (G4) digital I/O modules.

The board has a header connector and can be used with either of the following brains (I/O processors):

- a **B4** brain board, which connects to a serial network and uses the PAMUX protocol (typical use)
- a G4EB2 brain, which connects to an Ethernet network and uses the OptoMMP protocol. The G4EB2 brain can be used to upgrade older G4 I/O to Ethernet-based I/O, which can then be used with current SNAP PAC controllers and PAC Project software. Please note, however, that this brain does not use the PAMUX protocol, and performance will differ.

# **Specifications**

Operating Temperature Humidity	0 to 70 °C 95% humidity, non-condensing
Interface Connectors: Field Control Power	Screw-type terminal strip accommodates up to 10 AWG wire Boxed header accepts a B4 or G4EB2 brain Screw-type terminals accommodate up to 10 AWG wire
Communications	Two 50-pin header connectors for a PAMUX bus (Ethernet connections, if used, are made through the G4EB2 brain.)



### Part Number

Part	Description
G4PB32H	G4 32-channel mounting rack with header connector

 DATA SHEET
 PAGE

 Form 0459-151230
 PAGE

Opto 22 • 43044 Business Park Drive • Temecula, CA 92590-3614 • www.opto22.com

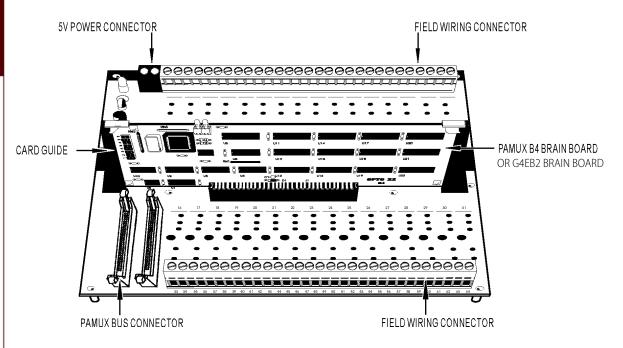
SALES 800-321-6786 • 951-695-3000 • FAX 951-695-3095 • sales@opto22.com • SUPPORT 800-835-6786 • 951-695-3080 • FAX 951-695-3017 • support@opto22.com © 2015 Opto 22. All rights reserved. Dimensions and specifications are subject to change. Brand or product names used herein are trademarks or registered trademarks of their respective companies or organizations.

G4 32-channel Digital I/O Mounting Rack **0 P T 0 2 2** 

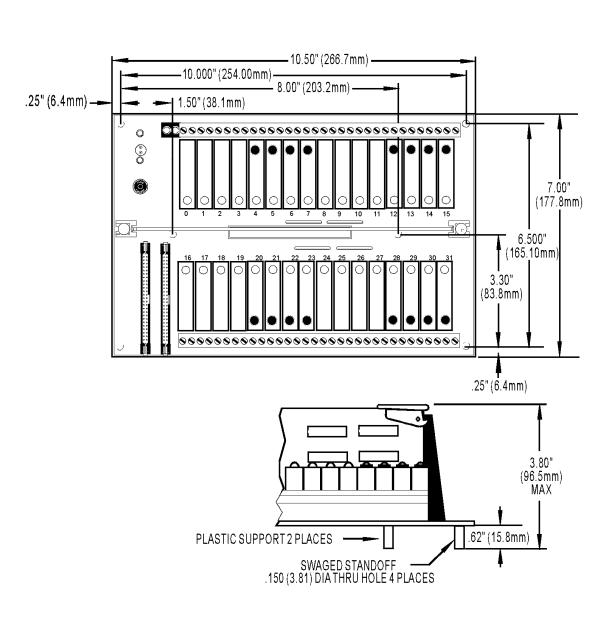
2

# G4 32-channel Digital I/O Mounting Rack

# Connections



See individual G4 modules for field wiring.



# G4 32-channel Digital I/O Mounting Rack

# Dimensions

Opto 22 • 43044 Business Park Drive • Temecula, CA 92590-3614 • www.opto22.com SALES 800-321-6786 • 951-695-3000 • FAX 951-695-3095 • sales@opto22.com • SUPPORT 800-835-6786 • 951-695-3080 • FAX 951-695-3017 • support@opto22.com © 2015 Opto 22. All rights reserved. Dimensions and specifications are subject to change. Brand or product names used herein are trademarks or registered trademarks of their respective companies or organizations.

DATA SHEET Form 0459-151230 PAGE 3

# More About OPTO 22

# More About Opto 22

# Products

Opto 22 develops and manufactures reliable, flexible, easy-to-use hardware and software products for industrial automation, energy management, remote monitoring, and data acquisition applications.

## groov

*groov* puts your system on your mobile device. With zero programming, you can build mobile operator interfaces to monitor and control systems from Allen-Bradley, Siemens, Schneider Electric, Modicon, and many more. Web-based *groov* puts mobile-ready gadgets at your fingertips. Tag them from your existing tag database, and they automatically scale for use on any device with a modern web browser. See groov.com for more information and your free trial.

# **SNAP PAC System**

Designed to simplify the typically complex process of selecting and applying an automation system, the SNAP PAC System consists of four integrated components:

- SNAP PAC controllers
- PAC Project<sup>™</sup> Software Suite
- SNAP PAC brains
- SNAP I/O

### **SNAP PAC Controllers**

Programmable automation controllers

(PACs) are multifunctional, modular controllers based on open standards.

Opto 22 has been manufacturing PACs for over two decades. The standalone SNAP PAC S-series, the rack-mounted SNAP PAC R-series, and the software-based SoftPAC<sup>™</sup> all handle a wide range of digital, analog, and serial functions for data collection, remote monitoring, process control, and discrete and hybrid manufacturing.

SNAP PACs are based on open Ethernet and Internet Protocol (IP) standards, so you can build or extend a system easily, without the expense and limitations of proprietary networks and protocols. Wired+Wireless<sup>™</sup> models are also available.

### PAC Project Software Suite

Opto 22's PAC Project Software Suite provides full-featured, costeffective control programming, HMI (human machine interface) development and runtime, OPC server, and database connectivity software for your SNAP PAC System.

Control programming includes both easy-to-learn flowcharts and optional scripting. Commands are in plain English; variables and I/ O point names are fully descriptive.

PAC Project Basic offers control and HMI tools and is free for download on our website, www.opto22.com. PAC Project

Professional, available for separate purchase, adds one SoftPAC, OptoOPCServer, OptoDataLink, options for controller redundancy or segmented networking, and support for legacy Opto 22 serial *mistic*<sup>m</sup> I/O units.

### **SNAP PAC Brains**

While SNAP PAC controllers provide central control and data distribution, SNAP PAC brains provide distributed intelligence for I/O processing and communications. Brains offer analog, digital, and serial functions, including thermocouple linearization; PID loop control; and optional high-speed digital counting (up to 20 kHz), quadrature counting, TPO, and pulse generation and measurement.

# SNAP I/O

I/O provides the local connection to sensors and equipment. Opto 22 SNAP I/O offers 1 to 32 points of reliable I/O per module,

depending on the type of module and your needs. Analog, digital, and serial modules are all mixed on the same mounting rack and controlled by the same processor (SNAP PAC brain or rack-mounted controller).

# 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 only 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. Our staff of support engineers represents 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.

Additional support is always available on our website: how-to videos, OptoKnowledgeBase, self-training guide, troubleshooting and user's guides, and OptoForums.

In addition, hands-on training is available for free 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 951-695-3000, or visit our website at www.opto22.com.

# www.opto22.com

www.opto22.com • Opto 22 • 43044 Business Park Drive • Temecula, CA 92590-3614 • Form 1335-131203 SALES 800-321-6786 • 951-695-3000 • FAX 951-695-3095 • sales@opto22.com • SUPPORT 800-835-6786 • 951-695-3080 • FAX 951-695-3017 • support@opto22.com © 2015 Opto 22. All rights reserved. Dimensions and specifications are subject to change. Brand or product names used herein are trademarks or registered trademarks of their respective companies or organizations.

