RACK - CLASSIC/STANDARD 8-CHANNEL MOUNTING RACK

Features

> Connects with Optomux (B1), Pamux (B5), and Mistic (B100) protocol brain boards

> Operating temperature range: 0 to 70 ℃

DESCRIPTION

The PB8H I/O mounting rack can accomodate up to eight Opto 22 standard (Generation 1) digital single channel I/O modules in any combination. The PB8H is designed to interface to Optomux (B1), Pamux (B5), or Mistic (B100) protocol brain boards via a 50-pin header connector.
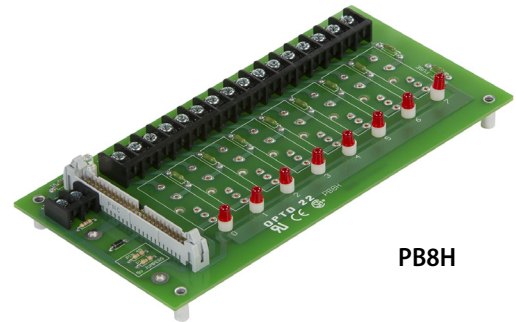
This 50-pin header connector also allows an easy connection to computer parallel I/O ports via a 50-conductor ribbon cable. Special mounting tabs allow the PB8H to be used with the Opto 22 PBSA, PBSB, and PBSC power supplies.

PB8H

CONNECTIONS

PB8H Connections

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

1. Even pins on control connector are connected by etch to common.

2. +VCC and return connected to two point terminal strips.

3. At each module position on the field terminal strip, the lower number is always connected to pin 1 of the I/O module.

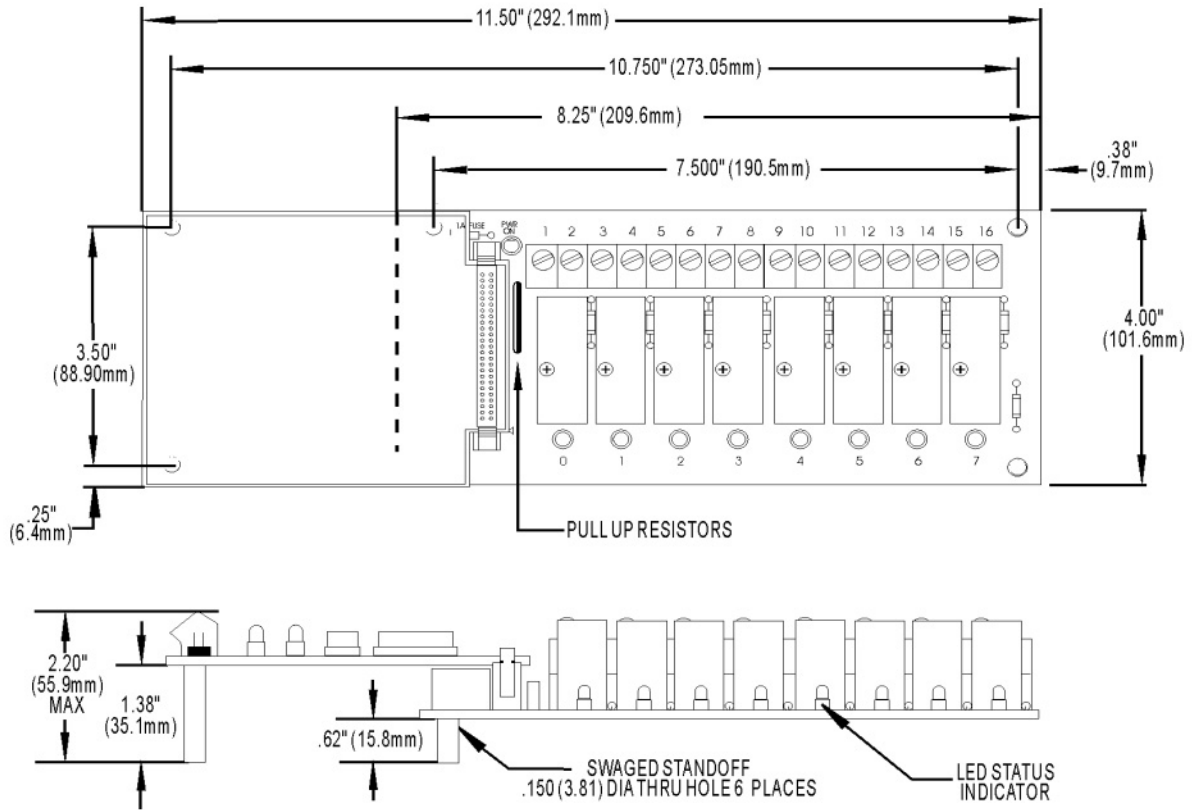## SPECIFICATIONS

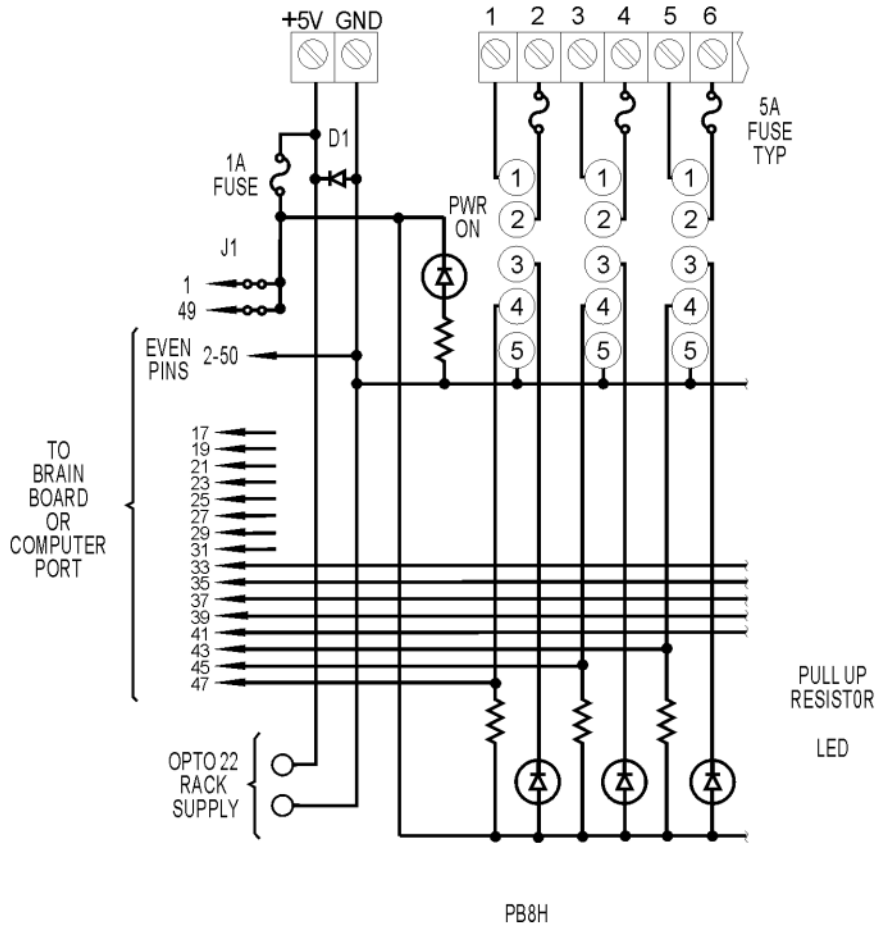|	
Operating Temperature	0 to 70 °C
Relative Humidity	95%, Non-condensing
Interface Connectors Field	6-32 Screw Terminals
Control	50-conductor Header connector
Power	2-position Screw Terminal or Opto 22 PBSA/B/C Power Supply
Compatible I/O Module Family	Standard (Generation 1) Digital 5-volt logic
Agency Approvals	UL, CE, CSA; UKCA

Part Numbers

Part	Description
PB8H	8-Channel Standard Digital Mounting Rack

MADE IN THE
USA

DIMENSIONS

PULL UP RESISTORS

11.50" (292.1mm)
10.750" (273.05mm)
8.25" (209.6mm)
7.500" (190.5mm)
.38" (9.7mm)
3.50" (88.90mm)
4.00" (101.6mm)
.25" (6.4mm)

2.20" (55.9mm) MAX
1.38" (35.1mm)
.62" (15.8mm)

SWAGED STANDOFF
.150 (3.81) DIA THRU HOLE 6 PLACES

LED STATUS INDICATOR

OPTO 22

SCHEMATICS

PB8H

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
- 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.