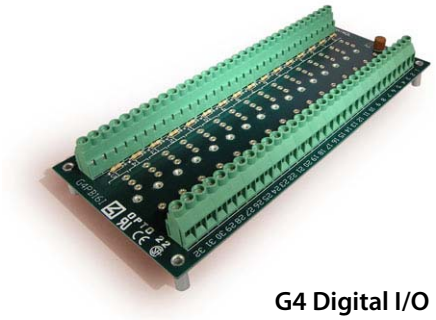
Classic G4 16-Channel Rack

Features

- Requires minimum panel space
- Spare module fuse on board
- Screw terminals on both control and field connections
- Negative-true or positive-true logic wiring for output modules
- Negative-true logic wiring for input modules
- UL recognized, CSA certified, CE approved



G4 Digital I/O Rack

Description

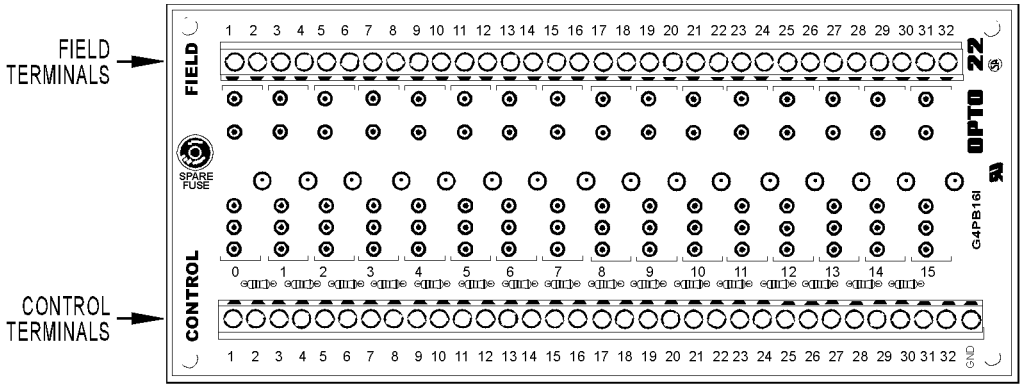
The G4PB16I I/O mounting rack accommodates up to 16 G4 digital I/O modules and features channel-to-channel isolation between all field and control circuits.

Output modules may have their control side wired for either positive-true or standard negative-true control signals from computer I/O ports. Input modules operate only with negative true logic.

Insert and remove modules easily and quickly without disturbing field wiring. Modules are secured to the mounting rack with a captive hold-down screw. Barrier strips with screw terminals provide the field, control, and mounting rack power connections.

Specifications

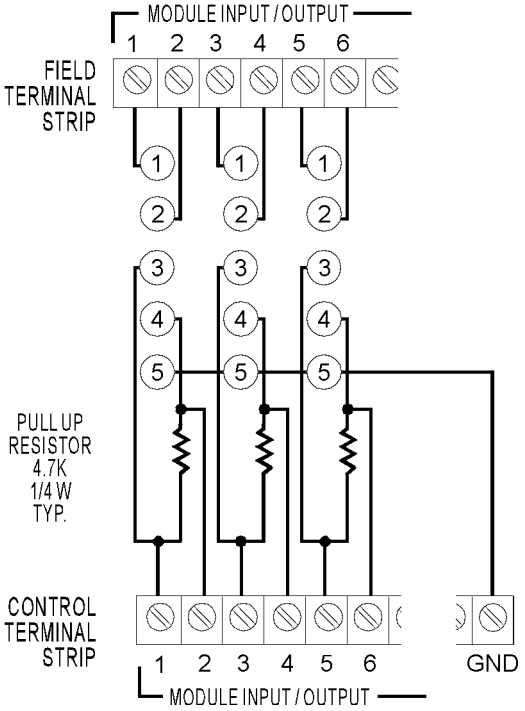
Interface connectors for Field and Control	Screw-type barrier strip accommodates up to 10 AWG wire
Operating temperature	0 to 70 °C
Humidity	95% relative humidity, non-condensing



Part Number

Part	Description
G4PB16I	G4 16-Channel I/O Module Rack Isolated Control

Connections



Module Position	Control Terminals	Field Terminals
0	1 and 2	1 and 2
1	3 and 4	3 and 4
2	5 and 6	5 and 6
3	7 and 8	7 and 8
4	9 and 10	9 and 10
5	11 and 12	11 and 12
6	13 and 14	13 and 14
7	15 and 16	15 and 16
8	17 and 18	17 and 18
9	19 and 20	19 and 20
10	21 and 22	21 and 22
11	23 and 24	23 and 24
12	25 and 26	25 and 26
13	27 and 28	27 and 28
14	29 and 30	29 and 30
15	31 and 32	31 and 32

Notes:

1. At each module position on the field terminal strip, the lower number is always connected to pin 1 of the I/O module.
2. Input modules and dry contact output modules (G4ODC5R and G4ODC5R5) require the power supply's ground to be connected to the control side's GND terminal.
3. Input modules and dry contact output modules (G4ODC5R and G4ODC5R5) require odd numbered connections on the control side be connected to +VCC.
4. Input modules use even-numbered control terminals and can only be wired for negative-true logic.
5. To wire output modules for standard negative-true logic, then connect the odd-numbered control terminals to Vcc and use the even-numbered terminals for control.
6. To wire output modules for positive-true logic, then connect the even-numbered control terminals to logic ground and use the odd-numbered terminals for control.

See diagrams on the following page.

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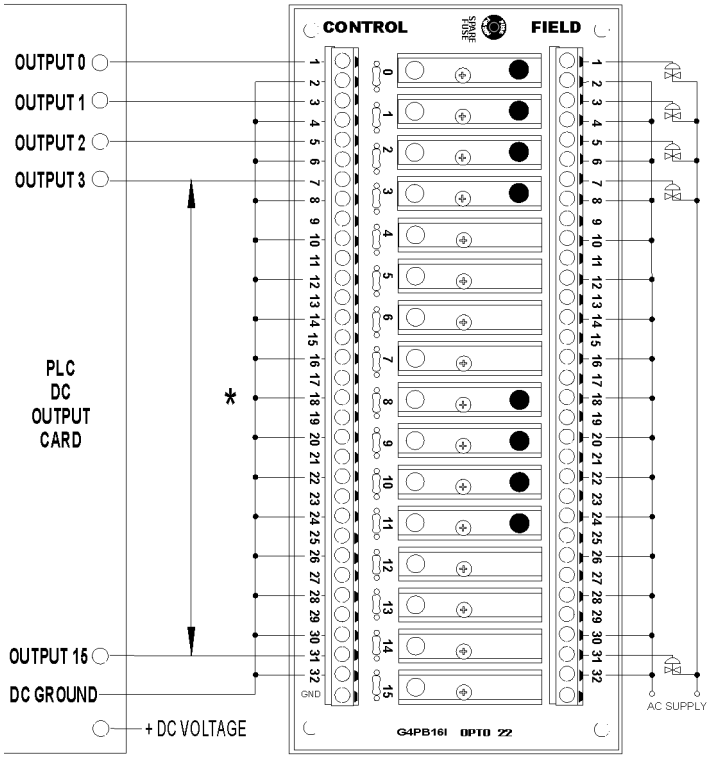
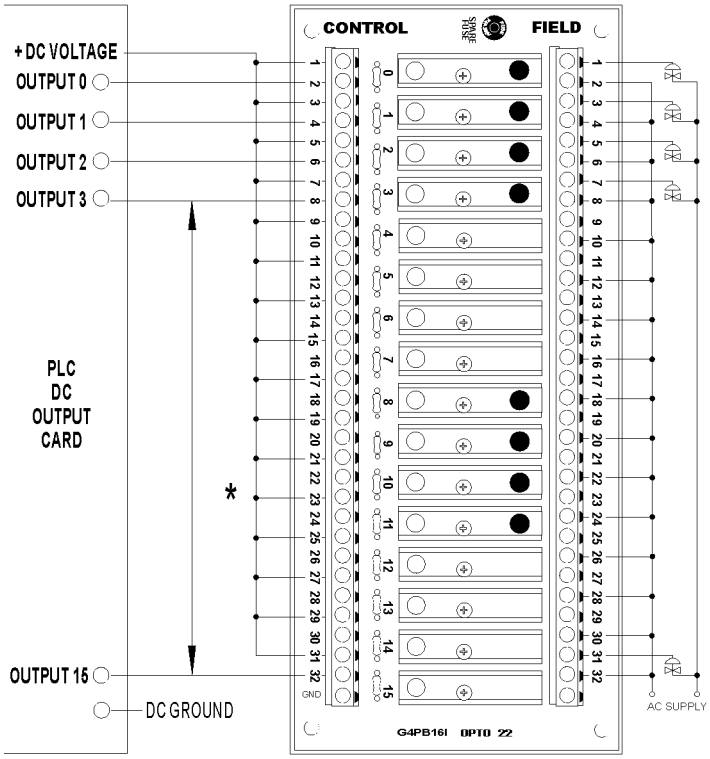
Applications

Positive true logic connection to PC



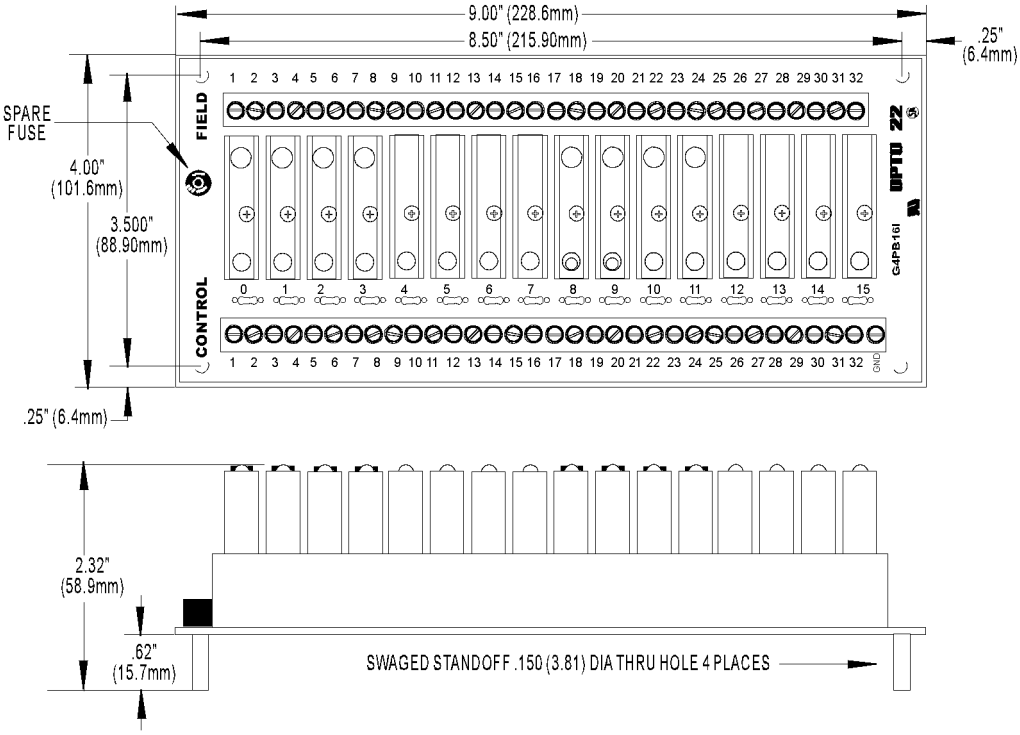
* This wiring can be done using a G4STRAP.

Negative true logic connection to PC



* This wiring can be done using a G4STRAP.

Dimensions



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.

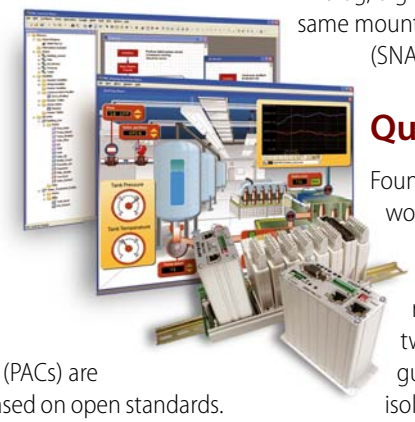
OptoEMU Energy Management System

The easy-to-use OptoEMU Sensor monitors electrical energy use in your facility and delivers detailed, real-time data you can see and analyze. The Sensor can monitor energy data from pulsing meters, electrical panels or subpanels, and equipment. View energy data online using a software service or incorporate the data into your control system for complete energy management.

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™ 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 and the rack-mounted SNAP PAC R-series both 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.

PAC Project Software Suite

Opto 22's PAC Project Software Suite provides full-featured, cost-effective 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, PAC Project Professional, available for separate purchase, adds OptoOPCServer, OptoDataLink, options for controller redundancy or segmented networking, and support for legacy Opto 22 serial *mistic*™ 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 do no statistical testing and each part is tested twice before leaving our factory, we can guarantee most solid-state relays and optically isolated I/O modules for life.

comprehensive technical support for Opto 22 products. Our staff of support engineers represents decades of training and experience. Support is

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

contact Opto 22 headquarters at
or 951-695-3000, or visit our website at

Form 1335-110907