ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *Grayhill 70RCK32-HL* at our website: *Click HERE*

SYSTEM 50 RACKS OVERVIEW

I/O Racks Part Number Explanation

70MRCK16–HL

Series Number

Input Connection/Mounting
Blank = Edge Card Connector Only for Std. I/O *(Note 1)*
EC = Edge Card Connector only for Mini I/O *(Note 1)*
HL = Header Connector: long ejector levers *(Note 2)*
DIN = DIN Rail Mount
48 = 48-pin Euro DIN Connector *(Note 3)*

Number of Modules or Rack Positions
4 = 4 Modules
4R = 4 Modules, Positive or Negative True Logic
8 = 8 Modules
16 = 16 Modules
16T= Terminal Blocks for Control and Field Wiring
16I = Terminal Blocks for Control and Field Wiring: Positive or negative true logic
24 = 24 Modules
32 = 32 Modules

Mounting Rack Type
K = 1 Row of Modules in Line
Q = 2 Rows of Modules *(Mini racks replace Quad racks)*
M = Special 32 Position G5 Rack for MicroDAC
P = Special 32 Position G5 Rack for Parallel Controller Board

RC = Mounting Rack

Module Type
L = OpenLine® I/O Modules
G = G5 I/O Modules
M = Mini I/O Modules
Blank = Standard I/O Module

Note 1– 50-pin card edge mates with 3M part number 3415-0001 or equivalent.
Note 2– Racks with long ejector levers mate with ribbon cable connectors with strain relief (Molex part number 15-29-9350 or equivalent) or discrete wire connectors (Molex part number 22-55-2502 or equivalent).
Note 3– Racks with 48-pin Euro DIN connector are special 16 position OpenLine© racks for OpenDAC© controllers.

Not all combinations are valid, see Ordering Information on each page.

I/O Racks

I/O racks are passive backplanes into which I/O modules can be installed and removed. I/O racks connect one of the "logic side" terminals from each module to an associated pin on the logic side connector for interface to the controller. I/O bases have an integral processor and dual port memory chip. The I/O handles scanning and storage of the I/O information which can be accessed over the bases address/databus. Up to 8 racks can be stacked along a DIN rail.

Standard Mounting Racks

Mounting racks provide a convenient method of connecting to I/O modules. Most racks have the option of a card edge or header connector for the logic signals. Field wires are connected to open or closed terminal blocks.

The modules are plugged into receptacle cups or connectors and are held in place by hold down screws, bars or clips. An LED indicates the status of each digital module. A five amp replaceable fuse protects the outputs from short circuits.

G5 Mounting Racks

G5 mounting racks are designed to accommodate G5 modules, which incorporate a status LED in the module. The G5 output modules also have an integral fuse. This eliminates the need for module fuses and LED status indicators on the rack. The G5 modules are slightly thinner than the standard modules. When used with the MicroDAC or Microlon® controllers, analog and digital I/O modules can be intermixed on the same G5 rack.

Miniature-Sized Racks

Our mini racks are much smaller than the industry standard racks. In addition to saving precious panel space, mini racks save installation time by replacing the individual module screws with a single hold down bar which is installed with two thumb screws.

UL Recognition/CSA Certification

Those I/O racks indicated as UL and CSA certified are listed in UL file E94540 and CSA file LR38763.

Replacement Fuses

All I/O locations on standard and mini I/O racks are fused with five amp Littelfuse 251-005 or Bussman GFA5 fuses. Logic supply on 24 and 32 position standard and mini I/O racks are fused with one amp Littelfuse 251-001 or Bussman GFA1 fuses. Logic supply on 16, 24 and 32 position G5 I/O racks are fused with 5 x20mm glass fuses rated one amp or five amps.

Custom I/O Racks and Termination Assemblies

For applications where our standard I/O racks do not fit your application, we offer custom I/O racks and termination assemblies. We have provided custom I/O racks with the following features:

- Special control logic connectors
- DIN rail mounting
- Depluggable terminal strips
- Options for sinking and/or sourcing of field power
- 19" Rack for mounting options
- Signal conditioning and transient protection

Our application engineers are ready to help you design your I/O termination assembly. If you have a unique application, give us a try.

I/O Module and Fuse Sockets

We recommend customers designing their own mini, standard or G5 I/O racks use Mill-Max part number 0355-0-15-01-02-01-10-0 sockets or equivalent for the I/O module leads and Mill-Max part number 0660-0-15-01-20-02-10-0 or equivalent for Littelfuse pico fuse leads. Custom OpenLine® I/O racks should use Crane connectors for the input and for the output.

Logic Supply

To power an I/O rack, connect a power supply to the 2 position logic supply terminal block, taking care that the polarity is correct. Alternately, the I/O rack may be powered through the 50-pin connector. Pin #49 on all other racks is +Vcc. Installation of a jumper or fuse may be necessary on the I/O rack to complete this connection. See details on the following pages.

Field Terminal Block-Wire Size Quantity per Terminal

	AWG			
I/O Rack Type	**10**	**12**	**14**	**16**
Mini	–	–	1	2
G5	1	1	2	3
OpenLine®	–	–	1	2

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP