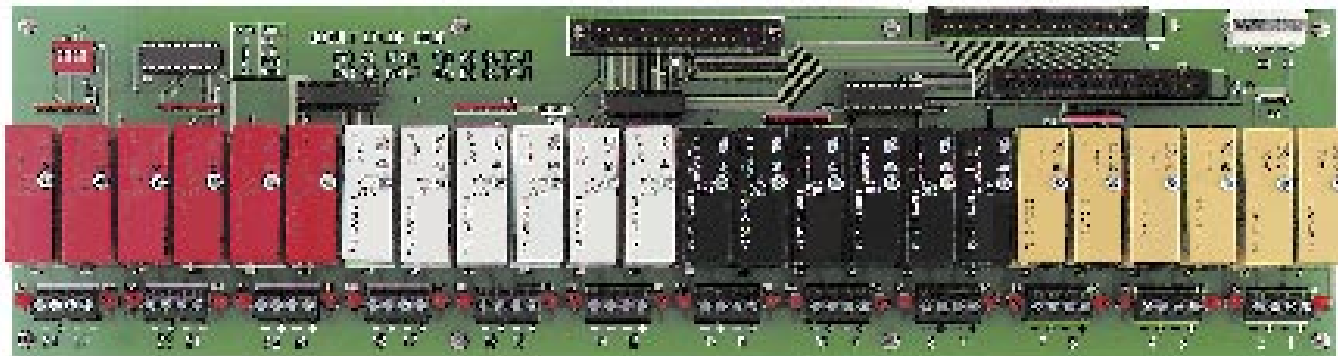




**\$99**  
Basic Unit

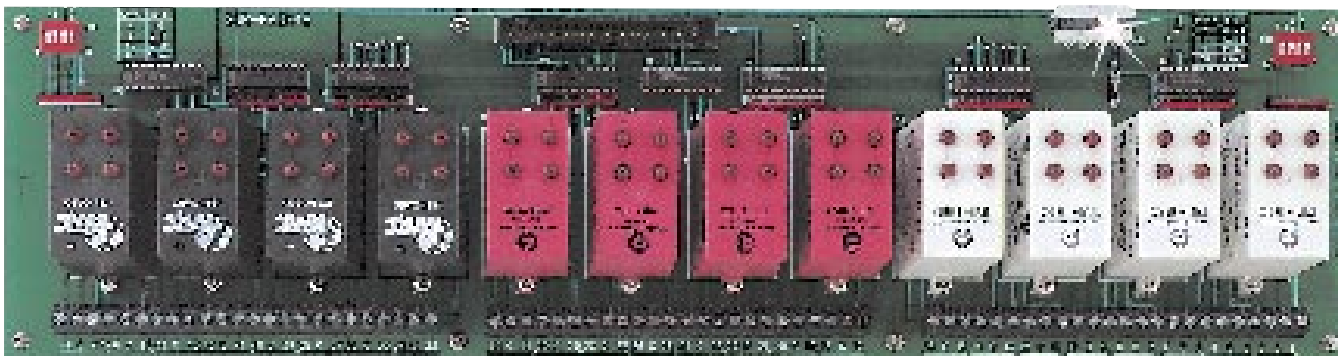
# SSR-RACK48, SSR-RACK24 and SSR-RACK08

Interface Racks for Solid  
State Input/Output Modules



SSR-RACK24

Racks Shown with Optional Solid State I/O Modules



SSR-RACK48

- ✓ **48, 24 and 8 Channel Models**
- ✓ **Direct Connection to the CIO Family of Digital I/O Plug-in Boards**
- ✓ **On-Board Buffers**
- ✓ **Powered by 5 Vdc**

Most digital I/O boards can not be directly interfaced to real world devices. Output voltages are usually limited to TTL levels (0/5 Vdc) with a few milliamps of drive current. Inputs are also typically limited to a maximum 5 volt level. When higher voltages or currents are needed, OMEGA's solid state I/O modules are the perfect solution. Models are available for input or output signals in AC and DC voltage versions. The SSR-RACK series is a family of backplanes that accept the solid state I/O modules and provide a

direct connection to OMEGA's CIO family of digital I/O PC plug-in boards. Three models are available; the SSR-RACK48, SSR-RACK24 and SSR-RACK08 which are 48, 24 and 8 channel models respectively.

## SSR-RACK48

The SSR-RACK48 is a high density mounting and interface rack for the quad type solid state I/O modules (OMEGA's SSS-Q series). The rack can hold 12 quad modules for a total of 48 channels of I/O. The SSR-RACK48 provides screw terminals for field connections. The connection to the digital I/O board is made through a 50 pin connector. The SSR-RACK48 may be connected directly to the CIO-DIO192, CIO-DIO96 and CIO-DIO48 using a C50FF-2 cable.

## SSR-RACK24

The SSR-RACK24 accepts 24 of

OMEGA's single channel SSS series solid state I/O modules. Screw terminals for each module provide field connection. The SSR-RACK24 contains both a 37 pin and a 50 pin connector. The 37 pin connector is designed to interface to 24 channel I/O boards. The 50 pin connector is used to connect to I/O boards with 48 channels or greater. A second 50 pin connector is provided so additional SSR-RACK24s may be connected to the same digital I/O board.

The SSR-RACK24 may be connected directly to the CIO-DIO24, CIO-DIO24H and CIO-DIO24/CTR3 digital I/O boards using the C37FF-2 cable.

The SSR-RACK24 may be directly connected to the CIO-DIO192, CIO-DIO96 and the CIO-DIO48 boards using the C50FF-2 cable.



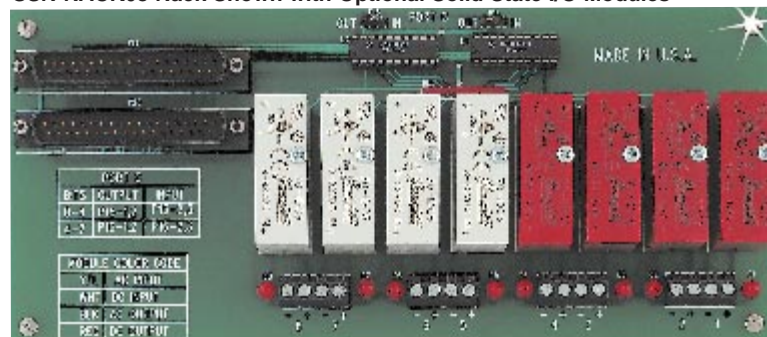
## SSR-RACK08

If your application needs only a limited number of solid I/O modules, you can save money and cabinet space with the SSR-RACK08. It holds 8 single function solid state relays and is cabled to Port C of the digital I/O board so that you can split the 8 relays between input and output. The SSR-RACK08 uses a 37 pin connector and can connect directly to a CIO-DIO24, CIO-DIO24H or CIO-DIO24/CTR3 with a C37FF-2 cable.

## SSR-RACKs Have Buffers on Board

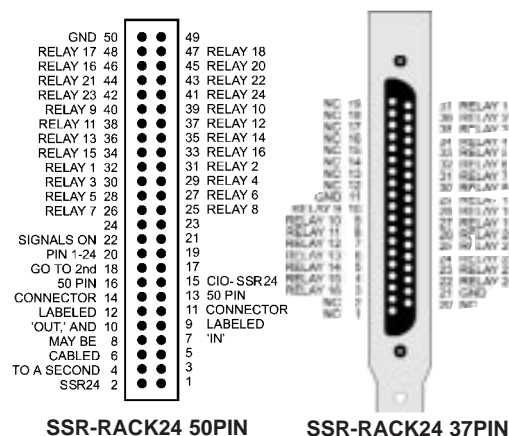
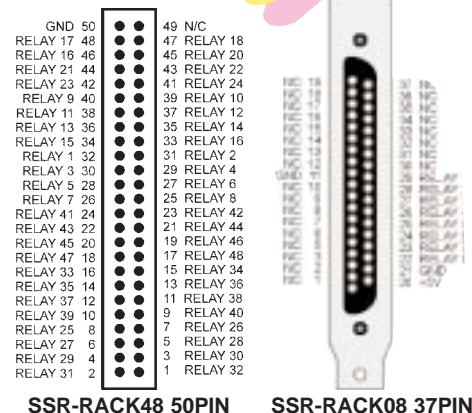
Most 8255 based digital I/O boards do not provide enough output current to directly turn on a solid state I/O module. The SSR-RACKs are designed with buffers on board. That means you can plug directly into the SSR-RACK from your CIO-DIO24, 48, 96 or 192 or any other 82C55 based digital I/O board.

## SSR-RACK08 Rack Shown with Optional Solid State I/O Modules



## SSR-RACK Inverting Logic

The SSR-RACK follows the industry standard convention of inverted logic used by virtually all manufacturers of solid state backplanes. When a high voltage is applied to an input module, the output of the SSR-RACK will go low (ground). When a low voltage is applied to an input module, the output of the SSR-RACK will be a high signal (5V). Output modules also use inverted logic. This means that a 0 output from the digital I/O board will cause an output module to activate (complete the circuit) while a 1 (TTL high) will cause the relay to deactivate. The chips that invert the logic are socketed and may easily be substituted with chips that do not invert the logic.



## Digital I/O Board Compatibility Guide

Rack	Digital I/O Boards	Cable
SSR-RACK48	CIO-DIO192, CIO-DIO96, CIO-DIO48	C50FF-2
SSR-RACK24	CIO-DIO192, CIO-DIO96, CIO-DIO48	C50FF-2
SSR-RACK24	CIO-DIO24, CIO-DIO24H, CIO-DIO24/CTR3	C37FF-2
SSR-RACK08	CIO-DIO24, CIO-DIO24H, CIO-DIO24/CTR3	C37FF-2

## Dimensions:

**SSR-RACK48 and RACK24:**

17"L X 4.5"W X 1.5"H (with relays)

**SSR-RACK08:**

9"L X 4"W X 1.5"H (with relays)

**Power:** +5 Vdc externally supplied or from PC with CMOLEX-10 cable

## To Order (Specify Model Number)

Model Number	Price	Description
SSR-RACK48	\$199	48 channel solid state I/O module rack, accommodates 12 quad I/O modules
SSR-RACK24	149	24 channel solid state I/O module rack, accommodates 24 single channel I/O modules
SSR-RACK08	99	8 channel solid state I/O module rack, accommodates 8 single channel I/O modules

**Note:** The SSR-RACK24 and SSR-RACK48 include a 10' power cable.

**Ordering Example:** SSR-RACK48, 48 channel solid state I/O module rack, OMEGACARE<sup>SM</sup> 1 year extended warranty (adds 1 year to standard 3 year warranty) = accommodates 12 quad I/O modules, \$199 + 20 = 219

## Accessories

Model Number	Price	Description
C37FF-2	\$25	2 ft. 37 pin cable
C50FF-2	25	2 ft. 50 pin cable
BP-POWER	25	3 connectors on a ISA card with backplate
PC-POWER-10	15	10' power cable, not required for the SSR-RACK08, included with the SSR-RACK24 and RACK48
Solid State I/O Modules		See I/O module data sheets for ordering information



## UNITED STATES

[www.omega.com](http://www.omega.com)

1-800-TC-OMEGA  
Stamford, CT.

## CANADA

[www.omega.ca](http://www.omega.ca)

Laval(Quebec)  
1-800-TC-OMEGA

## GERMANY

[www.omega.de](http://www.omega.de)

Deckenpfronn, Germany  
0800-8266342

## UNITED KINGDOM

[www.omega.co.uk](http://www.omega.co.uk)

Manchester, England  
0800-488-488

## FRANCE

[www.omega.fr](http://www.omega.fr)

Guyancourt, France  
088-466-342

## CZECH REPUBLIC

[www.omegaeng.cz](http://www.omegaeng.cz)

Karviná, Czech Republic  
596-311-899

## BENELUX

[www.omega.nl](http://www.omega.nl)

Amstelveen, NL  
0800-099-33-44



## More than 100,000 Products Available!

### • Temperature

Calibrators, Connectors, General Test and Measurement Instruments, Glass Bulb Thermometers, Handheld Instruments for Temperature Measurement, Ice Point References, Indicating Labels, Crayons, Cements and Lacquers, Infrared Temperature Measurement Instruments, Recorders Relative Humidity Measurement Instruments, RTD Probes, Elements and Assemblies, Temperature & Process Meters, Timers and Counters, Temperature and Process Controllers and Power Switching Devices, Thermistor Elements, Probes and Assemblies, Thermocouples Thermowells and Head and Well Assemblies, Transmitters, Wire

### • Flow and Level

Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

### • pH and Conductivity

Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

### • Data Acquisition

Auto-Dialers and Alarm Monitoring Systems, Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485 and Parallel Port Data Acquisition Systems, Wireless Transmitters and Receivers

### • Pressure, Strain and Force

Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Strain Gages, Torque Transducers, Valves

### • Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters