

Solid State Input/Output Modules Interchangeable Modules

SSS Series

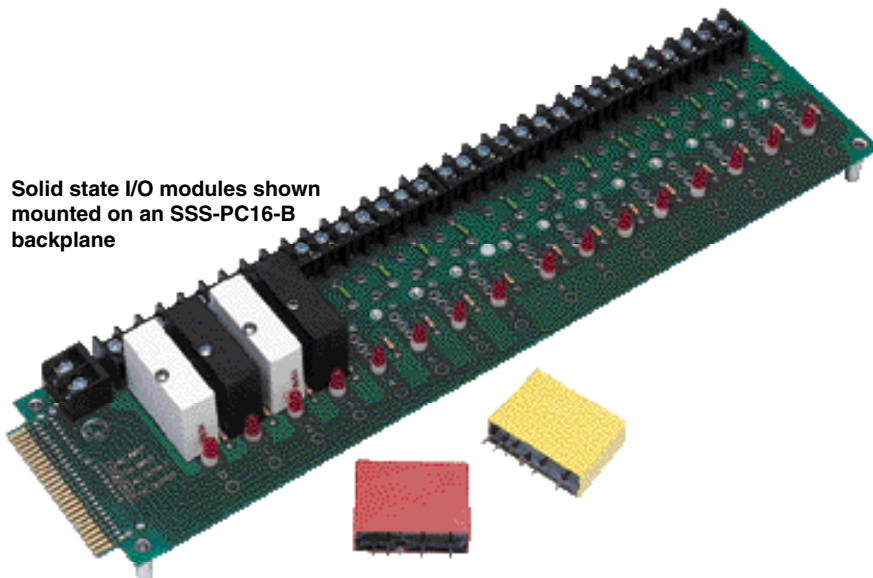
- ✓ 4000 Volt Isolation
- ✓ Logic Levels Switch High Level ac and dc Circuits
- ✓ High Level ac and dc Signals Switch Logic Circuits



Shown larger than actual size.

SSS series solid state I/O module provide a connection between power lines and computer interface systems. Input modules sense the presence of either an ac or dc voltage, and will send a TTL signal back to the computer. They provide feedback to the computer, giving the system information it

Solid state I/O modules shown mounted on an SSS-PC16-B backplane



Specifications

Operating Ambient:

-30 to 80°C (-22 to 176°F)

Storage Temperature:

-40 to 100°C (-40 to 212°F)

Isolation: 4000 Vrms

Capacitance, Input to Output: 8 pF

Input	Sense-Input	Control-Output
—	—	3 to 280 Vac
—	—	3 to 60 Vdc
90 to 140 Vac	—	—
3.3 to 32 Vdc	—	—

Output Modules DCO5-C and ACO5-C

Input Specifications	DCO5-C	ACO5-C
Nominal input Voltage	5.0 Vdc	5 Vdc
Minimum input Voltage ¹	2.5 Vdc	2.5 Vdc
Maximum input Voltage ²	7.5 Vdc	7.5 Vdc
Drop out Voltage	1.0 Vdc	1.0 Vdc
Maximum input current	27 mA dc w/o LED	27 mA dc w/o LED
Typical input current	10 mA dc	10 mA dc
Nominal input resistance	240 ohms	240 ohms

¹@ pin 3

² LED in series with nominal Voltage

Output Specifications	DCO5-C	ACO5-C
Maximum line voltage	60 Vdc	280V rms
Minimum line voltage	3.0 Vdc	24V rms
Max peak off-state voltage	60 Vdc	600V peak
Maximum off-state leakage	1.0 mA dc	4.5 mA rms
Maximum on-state current ¹	3.0A dc	3.0A rms
Minimum on-state current	10 mA rms	50 mA rms
Peak on-state Voltage	1.5 V peak	1.6 V peak
Maximum turn-on time	50μ sec	0.5 cycle
Maximum turn-off time	100μ sec	0.5 cycle

¹ Derate 33 mA/°C above 25°C

Input Modules DCI5-C and ACI5-C

Input Specifications	DCI5-C	ACI5-C
Maximum input Voltage	32 Vdc	140V rms
Minimum input Voltage	3.3 Vdc	90V rms
Maximum input current ¹	32 mA dc	10 mA rms
Drop out current	1.0 mA dc	2.5 mA rms
Allowable off-state input	1.0 mA dc	3.0 mA rms
Allowable off-state Voltage	2.0 Vdc	50V rms/Vdc

¹@ maximum input Voltage

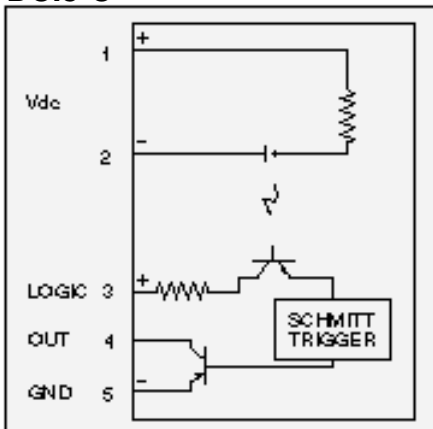
Output Specifications	DCI5-C	ACI5-C
Nominal logic supply Voltage	5.0 Vdc	5.0 Vdc
Min logic voltage @ pin 3	1.5 Vdc	1.5 Vdc
Max logic voltage @ pin 3	6.0 Vdc	6.0 Vdc
Typical logic supply current ¹	10 mA dc	10 mA dc
Max logic supply current ²	18.5 mA dc	18.5 mA dc
Max logic supply leakage cur. ²	10μA dc	10μA dc
Maximum output Voltage	30 Vdc	30 Vdc
Maximum output current	50mA dc	50mA dc
Max out. leakage current ²	10μA dc	10μA dc
Max out. Voltage drop ³	200m Vdc	200m Vdc
Maximum turn-on time	300μ sec	20ms
Maximum turn-off time	600μ sec	30ms

¹@ nominal Voltage with LED on mounting board

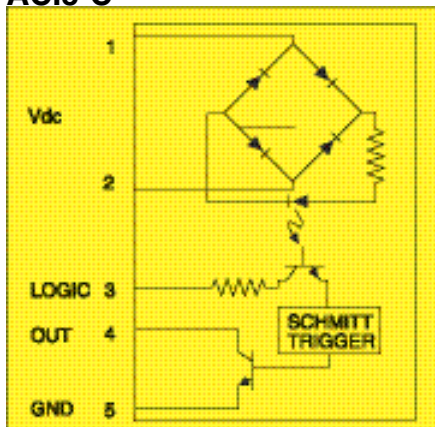
²@ maximum logic Voltage

³@ maximum output current

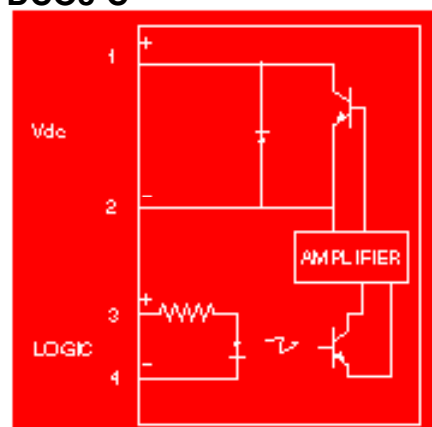
DCI5-C



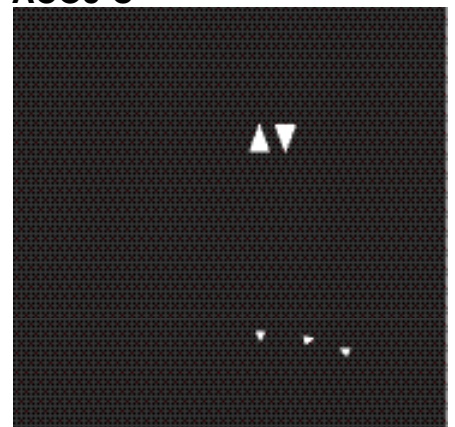
ACI5-C



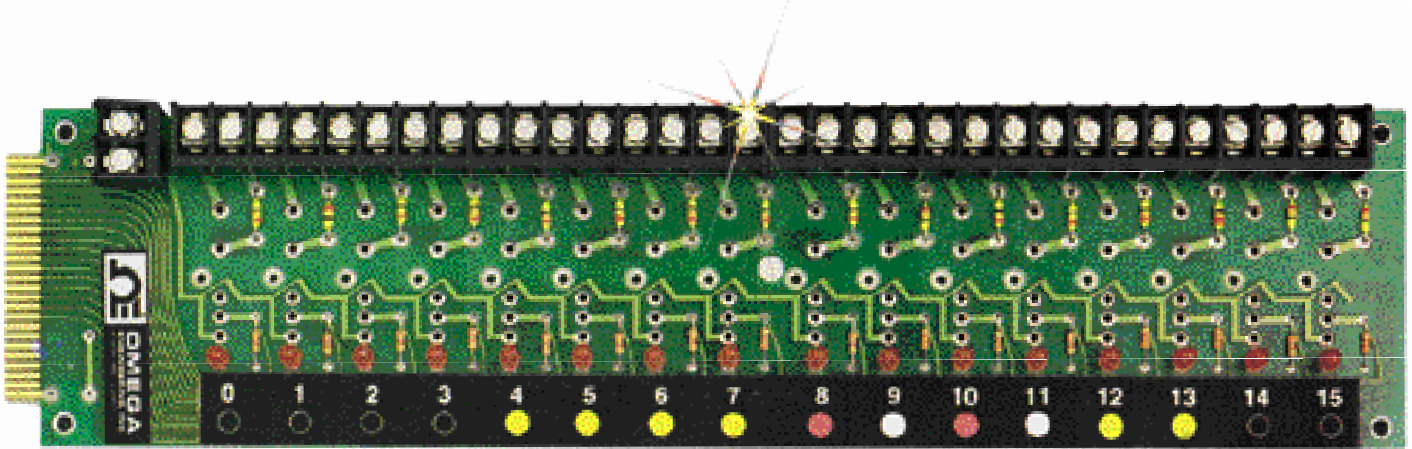
DCO5-C



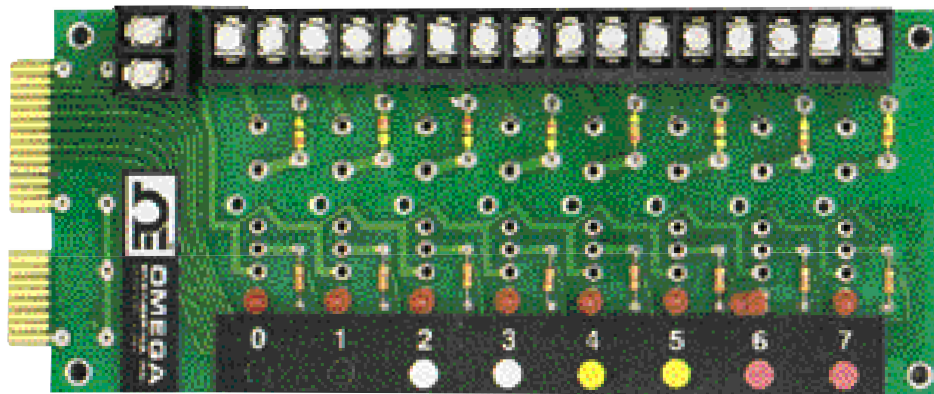
ACO5-C



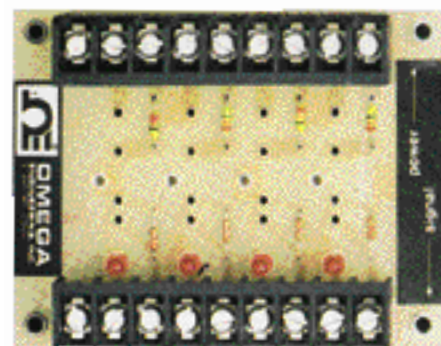
Solid State Switches Backplanes and Accessories



SSS-PC16-B
3½ x 15 ½"
16 position



SSS-PC8-B
3½ x 8½"
8 position



SSS-PC4I-C
3½ x 4 ½"
4 Position Isolated

OMEGA can supply a complete series of versatile backplanes to mount 4, 8, 16 or 24 modules. The backplanes include LED indicators to indicate signal status, pull-up resistors to avoid undefined states, and power fuses for overload protection on each channel.

SSS-PC4-C

A 4 channel backplane with screw terminal connections. Logic power and ground are common on the signal side.

SSS-PC4I-C

Same as above except that all channels are isolated from each other. Without the common signal ground, only output modules may be used.

SSS-PC8-B

An 8 channel backplane with channel signals, power and ground busses terminating in card edge fingers. Connection is made with either 26 or 50 pin connectors (0.10" centers)

SSS-PC16-B

16 position backplanes similar to SSS-PC8-B. Only 50 pin card edge connectors.



SSS-PC24-B

24 position backplanes. Uses 50 pin card edge connector.

Cables and Accessories

SSS-CA2

2' Ribbon cable with 50 pin connector

SSS-CA6

6' Ribbon cable with 50 pin connector

SSS-CA10

10' Ribbon cable with 50 pin connector

SSS-F1: 1 amp fuse

SSS-F5: 5 amp fuse