Solid State Input/Output Modules

Interchangeable Modules

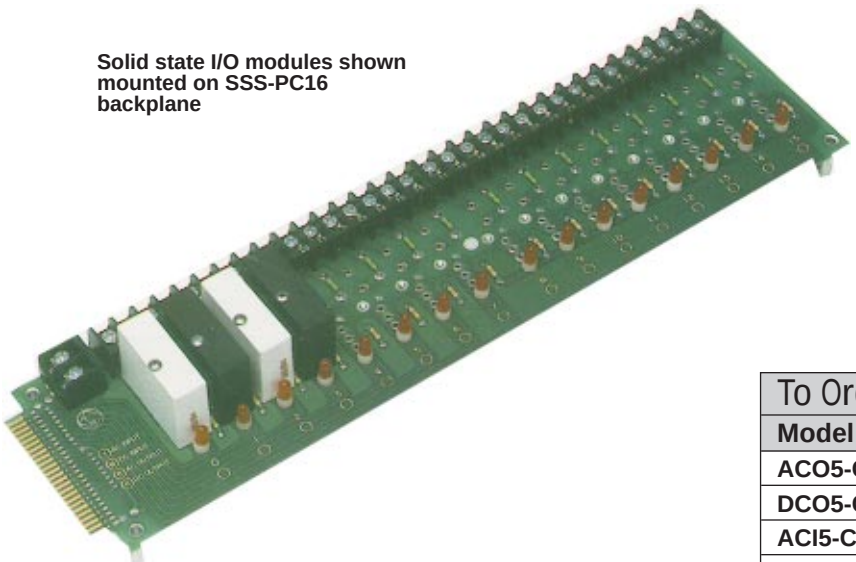
- **4000 Volt Isolation**
- **Logic Levels Switch High Level ac and dc Circuits**
- **High Level ac and dc Signals Switch Logic Circuits**

$15
Basic Unit

Shown larger than actual size.

Specifications

Operating Ambient:
-30 to 80°C (-22 to 176°F)
Storage Temperature:
-40 to 100°C (-40 to 212°F)
Isolation: 4000 Vrms
Capcitance, Input to Output: 8 pF



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

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 can act upon. Output modules receive TTL signals from the computer interface, and will switch ac or dc power lines on or off. These modules can be used for control systems, turning motors, actuators, etc. on or off.

To Order ***(Specify Model Number)***

Model No.	Price	Sense-Input	Control-Output
ACO5-C	**$15**	—	3 to 280 vac
DCO5-C	**15**	—	3 to 60 Vdc
ACI5-C	**15**	90 to 140 Vac	—
DCI5-C	**15**	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

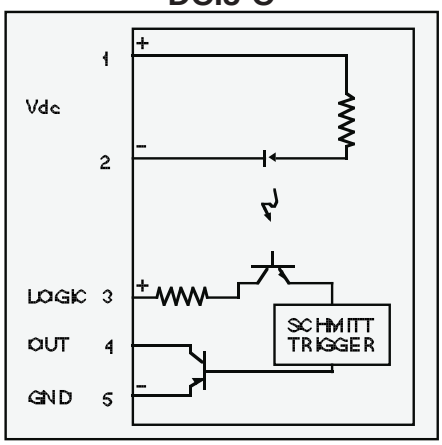
Input Specifications	DCI5-C	ACI5-C
Maximum input Voltage	32 Vdc	140V rms/Vdc
Minimum input Voltage	3.3 Vdc	90V rms/Vdc
Maximum input current[1]	32 mA dc	10 mA rms
Drop out current	1.0 mA dc	2.5 mA rms
Allowable off-state input	1.0 mA dc	3.0 mA rms
Allowable off-state Voltage	2.0 Vdc	50V rms/Vdc

[1]@ maximum input Voltage

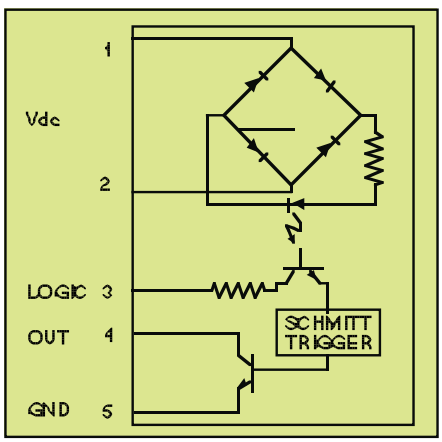
Output Specifications	DCI5-C	ACI5-C
Nominal logic supply Voltage	5.0 Vdc	5.0 Vdc
Min logic voltage @ pin 3	1.5 Vdc	1.5 Vdc
Max logic voltage @ pin 3	6.0 Vdc	6.0 Vdc
Typical logic supply current[1]	10 mA dc	10 mA dc
Max logic supply current[2]	18.5 mA dc	18.5 mA dc
Max log. sup. leakage cur.[2]	10µA dc	10µA dc
Maximum output Voltage	30 Vdc	30 Vdc
Maximum output current	50mA dc	50mA dc
Max out. leakage cur.[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]@ nomimal Voltage with LED on mounting board
[2]@ maximum logic Voltage
[3]@ maximum output current

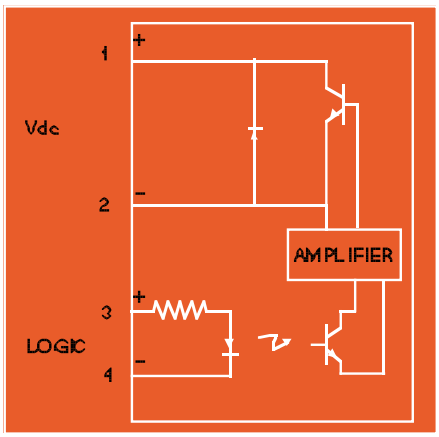
DCI5-C



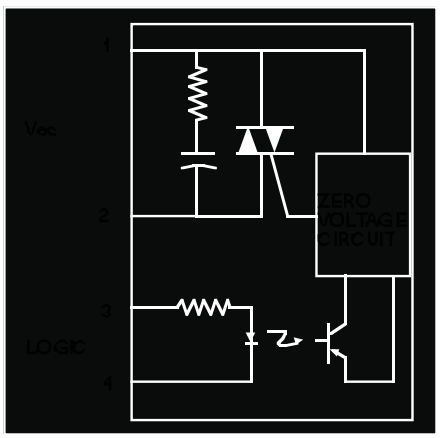
ACI5-C



DCO5-C



ACO5-C



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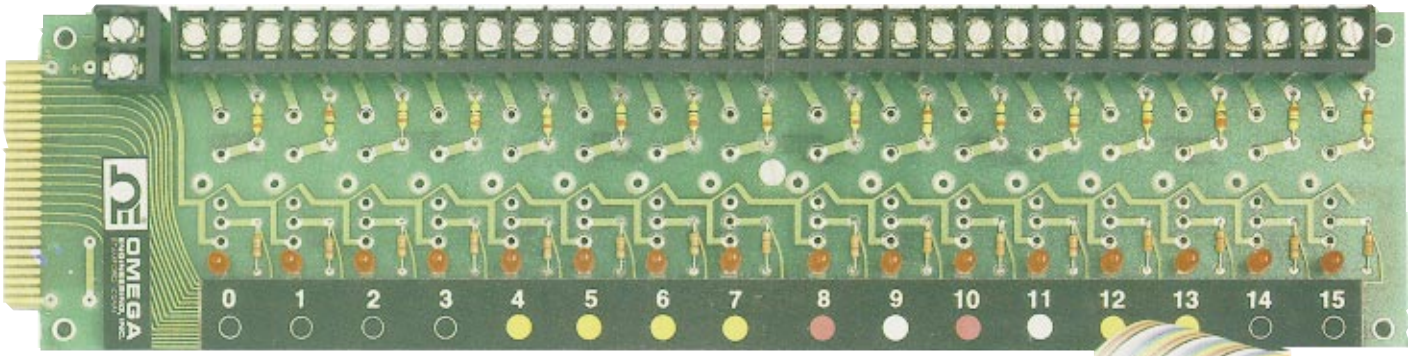
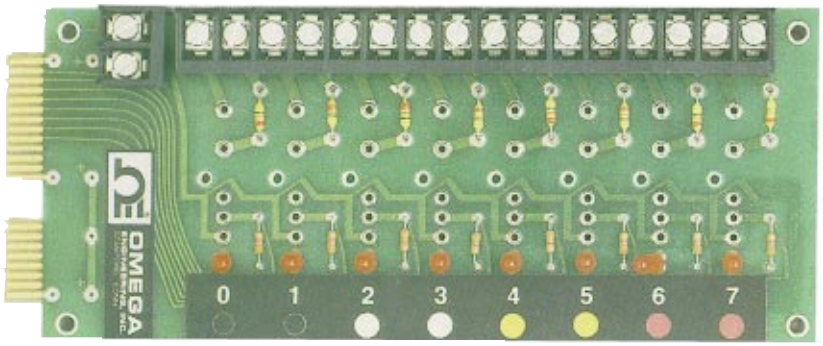
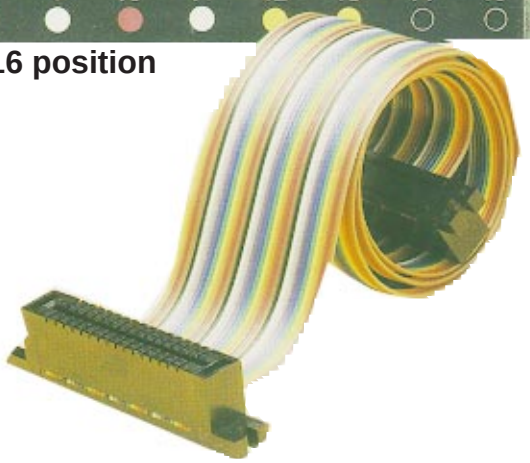
Solid State Switches

Backplanes and Accessories

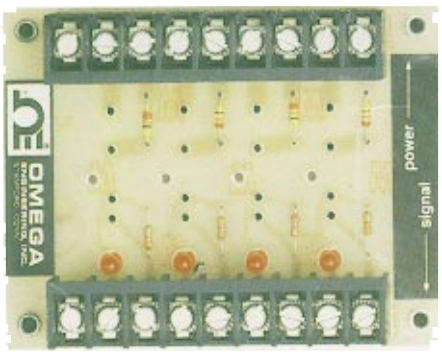


SSS-PC16-C **$100** 3 1/2” x 15 1/2” **16 position**





SSS-PC8-C 3 1/2” x 8 1/2”
$60 **8 position**



SSS-PC4I-C 3 1/2” x 4 1/2”
$40 **4 Position Isolated**

SSR-RACK24 $160
A 24 cnannel buffered backplane interfaces to PIO-12, PIO-24, CIO-DIO24, CIO-DAS08, CIO-DAS16 and CIO-DIO24H via a C37FF-2 cable. ($25 for cable)

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 $35
A 4 channel backplane with screw terminal connections. Logic power and ground are common on the signal side.

SSS-PC4I-C $40
Same as above exept that all channels are isolated from each other. Without the common signal ground, only output modules may be used.

SSS-PC8-C $60
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-C $100
16 position backplanes similar to SSS-PC8-C. Only 50 pin card edge connectors.

SSS-PC24-C $150
24 position backplanes. Uses 50 pin card edge connector.

Cables and Accessories

OMX-1804 $15
Solder Eye Type 50 pin connector
SSS-CA2 $20
2’ Ribbon cable with 50 pin connector
SSS-CA6 $25
6’ Ribbon cable with 50 pin connector
SSS-CA10 $30
10’ Ribbon cable with 50 pin connector
SSS-F1 $2: 1 amp fuse
SSS-F5 $2: 5 amp fuse