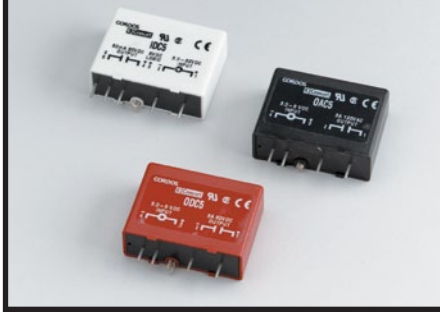


Accessories

Solid State I/O Modules



Keithley offers miniature solid state I/O modules. These I/O modules consist of four functions: DC input, DC output, AC input, and AC output. Each module type is color coded, white for DC input, red for DC output, yellow for AC input, and black for AC output. All

modules are fully encapsulated and feature 4000 Volts of optical isolation. The input modules sense an AC or DC voltage level and return a 0 or +5V signal back to the computer, typically through a digital input board. The output modules monitor a 0 or +5V signal from a digital output board and switch a high level AC or DC signal on or off.

Specifications

Input Modules

	SM-IDC5	SM-IAC5	SM-IAC5A
Input Voltage Range	3.3–32VDC	90–140VAC/VDC	180–280VAC/VDC
Max Input Current	34 mA	10 mA	10 mA
Max Turn On Time	1.0 ms	20 ms	20 ms
Max Turn Off Time	1.0 ms	30 ms	30 ms

Output Modules

	SM-ODC5	SM-ODC5A	SM-OAC5	SM-OAC5A
Output Voltage	3–60VDC	3–250VDC	1–140 V rms	24–280V rms
Max Load Current	3.0 A	1.0 A	3.5 A	3.5 A
Max Drive Current	18 mA	18 mA	20 mA	20 mA
Response Time	100 μ s (on) 750 μ s (off)	100 μ s (on) 750 μ s (off)	0.5 Cycle (on/off)	0.5 Cycle (on/off)

ENVIRONMENTAL

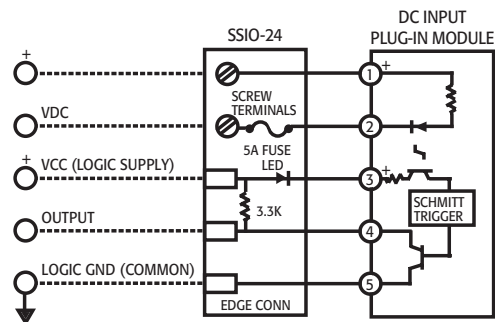
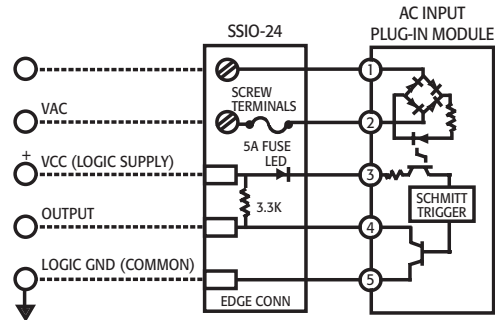
ISOLATION VOLTAGE: 4000V rms.
 OPERATING TEMPERATURE RANGE: –30 to +80°C.
 STORAGE TEMPERATURE RANGE: –40 to +100°C.
 EMC: Conforms to European Union Directive 89/336/EEC.
 SAFETY: Meets EN61010-1/IEC 1010.
 DIMENSIONS: 1.7in H \times 1.0in L \times 0.4in W.

Ordering Information

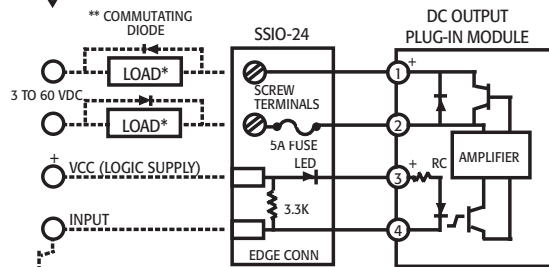
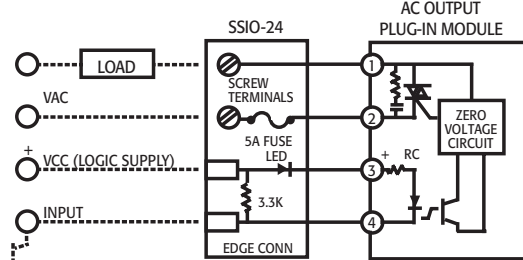
Miniature	Range	Direction
SM-IDC5	3.3–32VDC	Input
SM-IAC5	90–140VAC/VDC	Input
SM-IAC5A	180–280VAC/VDC	Input
SM-ODC5	3–60VDC	Output
SM-ODC5A	5–200VDC	Output
SM-OAC5*	12–140VAC	Output
SM-OAC5A	24–280VAC	Output

* For highly reactive loads (power factor \leq 0.5) order SM-OAC5R

Solid State I/O Modules Input Diagrams



Solid State I/O Modules Output Diagrams



* SINK OR SOURCE CURRENT
 ** MUST BE USED ON INDUCTIVE LOADS
 NOMINAL RC 250 OHMS

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