

## General

The G2S08 opto-isolated solid-state switching module is designed for routing or controlling high current loads under remote control. It is available in either AC or DC configurations to handle even some of the toughest power routing requirements.

The user can specify AC/DC or DC versions, plus a few different switching configurations to meet the most popular switching requirements. Solid-state switching elements are strictly used in the G2S08 modules for high reliability and non-stick contact operation. Minor OFF current leakage can occur for AC versions where it should not be used where personnel safety is a concern. Single-pole and double-pole versions are available. The module also features hot-swap control technology for easy maintenance.

For control and DC power, the module must be installed into any G2 type mainframe controller. The mainframe must have either the -200 power supply configuration, or the redundant -D200 version.

## Applications

- ATE test stations
- Power dropout simulations
- Motor controllers
- High power solenoid activator
- UUT controlled power-up

## Features

- High reliability solid-state elements
- Available in AC or DC configurations
- AC types available in random or "Zero-Crossing" types
- Available in fast acting IGBT technology
- Hot-Swap module technology
- Rugged aluminum shielded enclosure
- Built-in control and status circuitry
- Compact packaging
- Custom versions easily made at factory
- Flow-through cooling

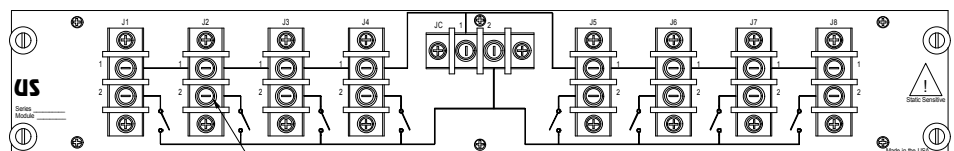
## Configurations

Model Number	Configuration	Type	Fig	Amps	Slots
■ G2S08-A4X12-22	Quad 1x1	AC	1	25	3 slots
■ G2S08-A4X12-25	Quad 1x1	AC	1	50	3 slots
■ G2S08-D4X12-22	Quad 1x1	DC	1	25	3 slots
■ G2S08-D4X12-25	Quad 1x1	DC	1	50	3 slots
■ G2S08-D4X12-29	Quad 1x1	DC	1	90	3 slots
■ G2S08-A4X1-22	Quad 1x1	AC	2	25	3 slots
■ G2S08-A4X1-25	Quad 1x1	AC	2	50	3 slots
■ G2S08-D4X1-22	Quad 1x1	DC	2	25	3 slots
■ G2S08-D4X1-25	Quad 1x1	DC	2	50	3 slots
■ G2S08-D4X1-29	Quad 1x1	DC	2	90	3 slots

Model Number	Configuration	Type	Fig	Amps	Slots
■ G2S08-A2X4-22	Dual 1x4	AC	3	25	3 slots
■ G2S08-A2X4-25	Dual 1x4	AC	3	50	3 slots
■ G2S08-D2X4-22	Dual 1x4	DC	3	25	3 slots
■ G2S08-D2X4-25	Dual 1x4	DC	3	50	3 slots
■ G2S08-D2X4-29	Dual 1x4	DC	3	90	3 slots
■ G2S08-A1X8-22	Single 1x8	AC	4	25	3 slots
■ G2S08-A1X8-25	Single 1x8	AC	4	50	3 slots
■ G2S08-D1X8-22	Single 1x8	DC	4	25	3 slots
■ G2S08-D1X8-25	Single 1x8	DC	4	50	3 slots
■ G2S08-D1X8-29	Single 1x8	DC	4	90	3 slots

**NOTE 1:** Modules with "AC" type elements may be used for either AC or DC type signals. Lower "on" voltage drop is accomplished with "DC" relays.

**NOTE 2:** For "AC" types, add an "R" suffix to include random "ON" of the relay if required. Without this suffix, the relay will turn "on" during the zero crossing of the AC voltage swing.



CONNECTORS ARE SCREW TERMINAL TYPE

FIGURE 1

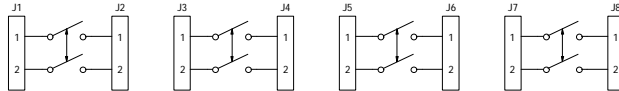


FIGURE 2

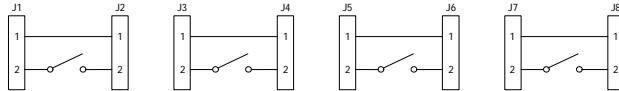
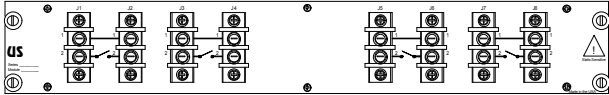


FIGURE 3

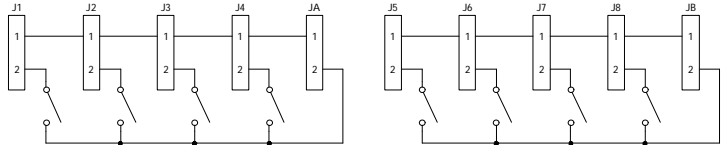
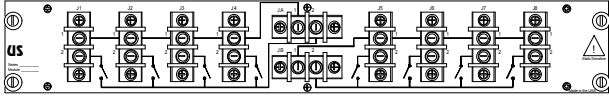
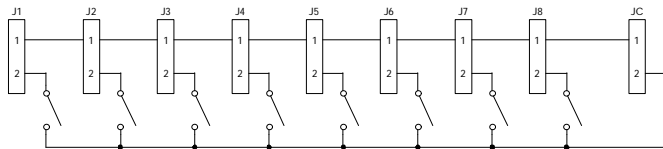
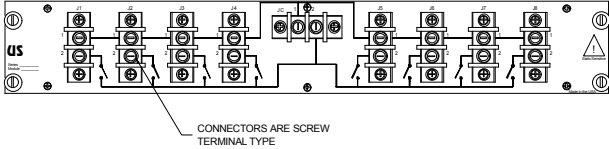


FIGURE 4



**AC/DC Relay Specifications**

- Switching elements . . . . .Solid-State (IGBT)
- Configuration . . . . .Normally open
- Signal type . . . . .AC or DC
- Max load current . . . . .See table
- Min load current . . . . .50mA
- Max leakage . . . . .1.0mA
- Max on-state Vdrop . . . . .4.1v @ Max load
- Line frequency . . . . .400Hz MAX (random type only)
- Max switching voltage . . .240 volts AC/DC

**DC Relay Specifications**

- Switching elements . . . . .Solid-State (MOSFD)
- Configuration . . . . .Normally open
- Signal type . . . . .DC (only)
- Max load current . . . . .See table
- Min load current . . . . .50mA
- Max on resistance . . . . .5mOhms @ Max load
- Max switching voltage . . .100VDC, (200V optional, call factory)

**General Specifications**

- Signal path . . . . .Analog, bi-directional
- Signal connector . . . . .Screw terminal (8-32)
- Switching speed . . . . .<1mS (plus control time)
- Module size . . . . .3 slot height
- Control type . . . . .G2 compatible
- Sparing . . . . .Hot-Swappable
- Construction . . . . .Shielded aluminum case
- DC power . . . . .-200 or -D200 configuration  
+5V (digital), +/-5V (analog)
- Weight . . . . .<5 lbs (fully populated)
- Operating temp . . . . .0 to +70C
- Non-operating temp . . . .-20 to +85C
- Humidity . . . . .0 to 95% (NC @ +25C)
- MTBF . . . . .>140,000 hours  
(per MIL-HDBK-217F, N1  
ground benign @ +25C)

Universal Switching's policy is one of continuous development, and consequently the company reserves the right to vary from the descriptions and specifications shown in this publication.