

## General

The relay-based G2R06 is a general purpose relay switching module. It provides a high performance, low cost solution for many applications like ATE. It is available in different contact versions, and additional special configurations can be made per spec by contacting the factory.

Ultra-high reliability relay elements are coupled with control and status circuitry. 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, D200, -207 or -D207 power supply configuration. Optionally, the -600, -D600, -100 or -D100 power supply configuration could be used if the -6x suffix is specified on the module.

## Applications

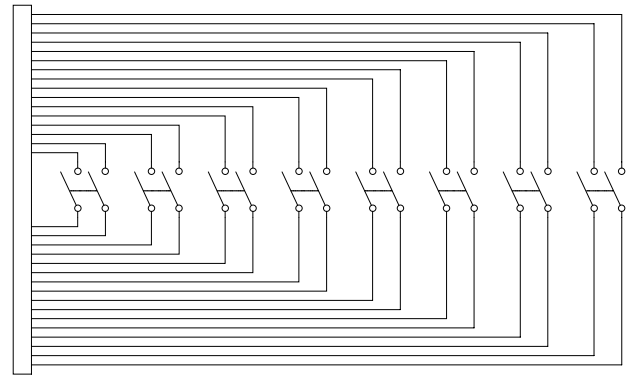
- ATE systems
- Communication installations
- General purpose signal routing
- Switching power (AC/DC)
- Satellite control centers
- Ground station IF signal routing

## Features

- High reliability relay elements
- DC to 10MHz bandpass (min)
- Standard DC-37P connectors (others optional)
- Hot-Swap module technology
- Plug-in relay sections (eight elements per)
- Rugged aluminum shielded enclosure
- Built-in control and status circuitry

## Configurations

Model Number	Configuration	Conn	Contacts
■ G2R06-D08-20	Eight DPST	DC-37P	1 amp
■ G2R06-D16-20	Sixteen DPST	DC-37P	1 amp
■ G2R06-D24-20	Twenty-four DPST	DC-37P	1 amp
■ G2R06-D32-20	Thirty-two DPST	DC-37P	1 amp
■ G2R06-D08-22	Eight DPST	DC-37P	2 amp
■ G2R06-D16-22	Sixteen DPST	DC-37P	2 amp
■ G2R06-D24-22	Twenty-four DPST	DC-37P	2 amp
■ G2R06-D32-22	Thirty-two DPST	DC-37P	2 amp



One of four sections



## Connector J1

Pin	Signal	Pin	Signal
1	Relay 01 IN (+)	20	Relay 01 IN (-)
2	Relay 02 IN (+)	21	Relay 02 IN (-)
3	Relay 03 IN (+)	22	Relay 03 IN (-)
4	Relay 04 IN (+)	23	Relay 04 IN (-)
5	Relay 05 IN (+)	24	Relay 05 IN (-)
6	Relay 06 IN (+)	25	Relay 06 IN (-)
7	Relay 07 IN (+)	26	Relay 07 IN (-)
8	Relay 08 IN (+)	27	Relay 08 IN (-)
9	GND	28	GND
10	GND	29	GND
11	GND	30	Relay 08 OUT (-)
12	Relay 08 OUT (+)	31	Relay 07 OUT (-)
13	Relay 07 OUT (+)	32	Relay 06 OUT (-)
14	Relay 06 OUT (+)	33	Relay 05 OUT (-)
15	Relay 05 OUT (+)	34	Relay 04 OUT (-)
16	Relay 04 OUT (+)	35	Relay 03 OUT (-)
17	Relay 03 OUT (+)	36	Relay 02 OUT (-)
18	Relay 02 OUT (+)	37	Relay 01 OUT (-)
19	Relay 01 OUT (+)		

## Connector J3

Pin	Signal	Pin	Signal
1	Relay 17 IN (+)	20	Relay 17 IN (-)
2	Relay 18 IN (+)	21	Relay 18 IN (-)
3	Relay 19 IN (+)	22	Relay 19 IN (-)
4	Relay 20 IN (+)	23	Relay 20 IN (-)
5	Relay 21 IN (+)	24	Relay 21 IN (-)
6	Relay 22 IN (+)	25	Relay 22 IN (-)
7	Relay 23 IN (+)	26	Relay 23 IN (-)
8	Relay 24 IN (+)	27	Relay 24 IN (-)
9	GND	28	GND
10	GND	29	GND
11	GND	30	Relay 24 OUT (-)
12	Relay 24 OUT (+)	31	Relay 23 OUT (-)
13	Relay 23 OUT (+)	32	Relay 22 OUT (-)
14	Relay 22 OUT (+)	33	Relay 21 OUT (-)
15	Relay 21 OUT (+)	34	Relay 20 OUT (-)
16	Relay 20 OUT (+)	35	Relay 19 OUT (-)
17	Relay 19 OUT (+)	36	Relay 18 OUT (-)
18	Relay 18 OUT (+)	37	Relay 17 OUT (-)
19	Relay 17 OUT (+)		

## Connector J2

Pin	Signal	Pin	Signal
1	Relay 09 IN (+)	20	Relay 09 IN (-)
2	Relay 10 IN (+)	21	Relay 10 IN (-)
3	Relay 11 IN (+)	22	Relay 11 IN (-)
4	Relay 12 IN (+)	23	Relay 12 IN (-)
5	Relay 13 IN (+)	24	Relay 13 IN (-)
6	Relay 14 IN (+)	25	Relay 14 IN (-)
7	Relay 15 IN (+)	26	Relay 15 IN (-)
8	Relay 16 IN (+)	27	Relay 16 IN (-)
9	GND	28	GND
10	GND	29	GND
11	GND	30	Relay 16 OUT (-)
12	Relay 16 OUT (+)	31	Relay 15 OUT (-)
13	Relay 15 OUT (+)	32	Relay 14 OUT (-)
14	Relay 14 OUT (+)	33	Relay 13 OUT (-)
15	Relay 13 OUT (+)	34	Relay 12 OUT (-)
16	Relay 12 OUT (+)	35	Relay 11 OUT (-)
17	Relay 11 OUT (+)	36	Relay 10 OUT (-)
18	Relay 10 OUT (+)	37	Relay 09 OUT (-)
19	Relay 09 OUT (+)		

## Connector J4

Pin	Signal	Pin	Signal
1	Relay 25 IN (+)	20	Relay 25 IN (-)
2	Relay 26 IN (+)	21	Relay 26 IN (-)
3	Relay 27 IN (+)	22	Relay 27 IN (-)
4	Relay 28 IN (+)	23	Relay 28 IN (-)
5	Relay 29 IN (+)	24	Relay 29 IN (-)
6	Relay 30 IN (+)	25	Relay 30 IN (-)
7	Relay 31 IN (+)	26	Relay 31 IN (-)
8	Relay 32 IN (+)	27	Relay 32 IN (-)
9	GND	28	GND
10	GND	29	GND
11	GND	30	Relay 32 OUT (-)
12	Relay 32 OUT (+)	31	Relay 31 OUT (-)
13	Relay 31 OUT (+)	32	Relay 30 OUT (-)
14	Relay 30 OUT (+)	33	Relay 29 OUT (-)
15	Relay 29 OUT (+)	34	Relay 28 OUT (-)
16	Relay 28 OUT (+)	35	Relay 27 OUT (-)
17	Relay 27 OUT (+)	36	Relay 26 OUT (-)
18	Relay 26 OUT (+)	37	Relay 25 OUT (-)
19	Relay 25 OUT (+)		

### Signal Specifications

Switching elements . . . . .Relay-based  
 Operating mode . . . . .Normally open (no terminations)  
 Ports per relay section . . . . .See configuration list  
 Signal type . . . . .Analog or digital, bi-directional  
 Signal connector . . . . .Male D-Sub Type (DC-37P)  
 Frequency range . . . . .DC - 10MHz (min)  
 On resistance . . . . .<500 mOhms  
 Contact rating . . . . .1 amp, 30 watts (optional 2 amp)  
 Switching speed . . . . .<5mS (plus control time)

### General Specifications

Module size . . . . .1 slot height  
 Control type . . . . .G2 compatible  
 Sparing . . . . .Hot-Swappable  
 Construction . . . . .Shielded aluminum case  
 DC power . . . . .-200, D200, -207 or -D207 configuration  
 Weight . . . . .<1.5lbs  
 Operating temp . . . . .0 to +70C  
 Non-operating temp . . . . .-20 to +85C  
 Humidity . . . . .0 to 95% (NC @ +25C)  
 Contact life . . . . .>100,000 operations (@1A)  
 MTBF (estimated) . . . . .>120,000 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.