

General

The relay-based G2R16 coaxial switching module provides a high performance, low cost solution for many applications. It is available in over fifteen versions and additional special configurations can be made per spec by contacting the factory.

Ultra-high reliability relay elements (>3,000,000 operations per port) are coupled with control and status circuitry. The module also features hot-swap control technology for easy maintenance.

The suffix of the model number can specify whether the module has BNC, TNC or SMA connectors, and the characteristic impedance of the module.

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

Applications

- ATE systems
- Communication installations
- Antenna routing
- Switching high speed ECL/PECL data
- Satellite control centers
- Ground station IF signal routing

Features

- High reliability relay elements
- DC to 1.3GHz bandpass (min)
- Choice of BNC, TNC or SMA signal connectors
- Hot-Swap module technology
- Plug-in relay elements
- Rugged aluminum shielded enclosure
- Built-in control and status circuitry

NOTE-1: If you need a self-terminating version of this module, please see data sheet #G2R16T-001

Configurations

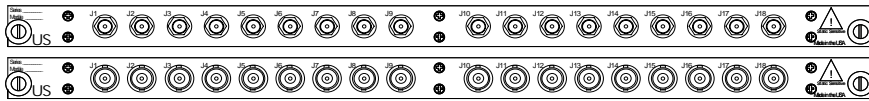
Model Number	Configuration	Conn	Impedance	Model Number	Configuration	Conn	Impedance
■ G2R16-11X16-25	One 1x16 w/EXP	BNC	50	■ G2R16-11X16-27	One 1x16 w/EXP	BNC	75
■ G2R16-21X8-25	Two 1x8	BNC	50	■ G2R16-21X8-27	Two 1x8	BNC	75
■ G2R16-4442-25	Three 1x4, one 1x2	BNC	50	■ G2R16-4442-27	Three 1x4, one 1x2	BNC	75
■ G2R16-3443-25	Two 1x3, two 1x4	BNC	50	■ G2R16-3443-27	Two 1x3, two 1x4	BNC	75
■ G2R16-61X2-25	Six 1x2	BNC	50	■ G2R16-61X2-27	Six 1x2	BNC	75
■ G2R16-11X16-25T	One 1x16 w/EXP	TNC	50	■ G2R16-11X16-25S	One 1x16 w/EXP	SMA	50
■ G2R16-21X8-25T	Two 1x8	TNC	50	■ G2R16-21X8-25S	Two 1x8	SMA	50
■ G2R16-4442-25T	Three 1x4, one 1x2	TNC	50	■ G2R16-4442-25S	Three 1x4, one 1x2	SMA	50
■ G2R16-3443-25T	Two 1x3, two 1x4	TNC	50	■ G2R16-3443-25S	Two 1x3, two 1x4	SMA	50
■ G2R16-61X2-25T	Six 1x2	TNC	50	■ G2R16-61X2-25S	Six 1x2	SMA	50

BNC VERSION (50 OR 75 OHM)



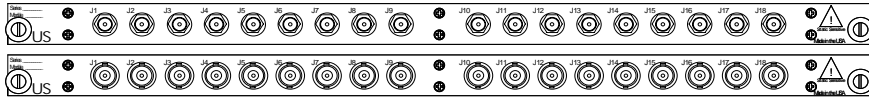
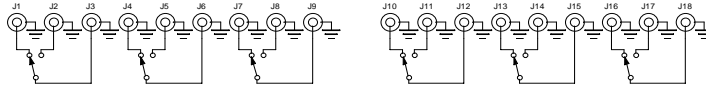
SMA VERSION (50 OHM)





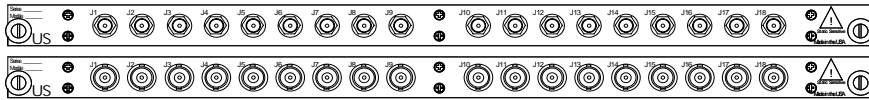
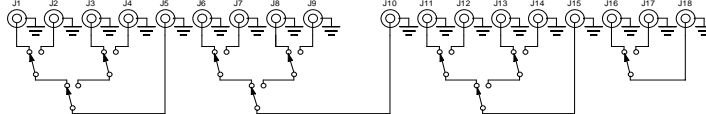
G2R16-61X2-25S

G2R16-61X2-2x



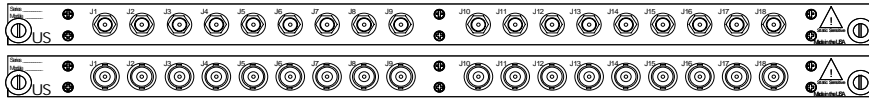
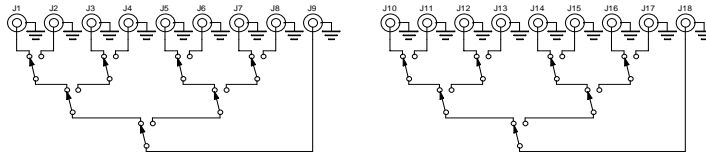
G2R16-4442-25S

G2R16-4442-2x



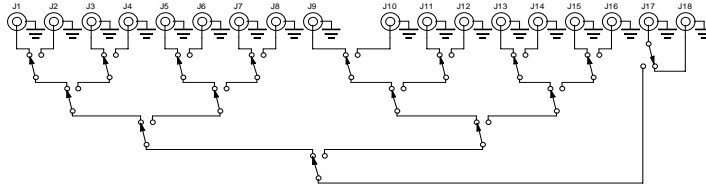
G2R16-21X8-25S

G2R16-21X8-2x



G2R16-11X16-25S

G2R16-11X16-2x



Signal Specifications

- Switching elementsRelay-based
- Operating modeNormally open (no terminations)
- Ports per relay sectionSee configuration list
- Signal typeAnalog or digital, bi-directional
- Signal connectorBNC, TNC or SMA
- Frequency rangeDC - 1.3GHz (min)
- Impedance50 or 75 ohm versions
- Insertion loss<2dB @ 1.3GHz
- Port matching (loss)<.15dB typical
- Repeatability<0.10dB max
- Crosstalk isolation (min)>80dB @ 10MHz
>70dB @ 300MHz
>60dB @ 1GHz
- Contact rating1/2 amp, 10 watts
- Switching speed<5mS (plus control time)

General Specifications

- Module size1 slot height
- Control typeG2 compatible
- SparingHot-Swappable
- ConstructionShielded aluminum case
- Mating SMA torque8 inch pounds MAX
- DC power-200 or D200 configuration
+5V (digital), +5V (analog)
- Weight<1.5lbs
- Operating temp0 to +70C
- Non-operating temp-20 to +85C
- Humidity0 to 95% (NC @ +25C)
- Contact life>3,000,000 operations (@.01A)
- 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.