

GX6021 SERIES

20-CHANNEL RF MULTIPLEXER/SCANNER

- High density PXI RF multiplexer
- Four groups of 1x4 multiplexer scanners
- Groups may be daisy-chained
- >200 MHz bandwidth
- 3U PXI board



DESCRIPTION

The GX6021 is a high-density 3U PXI switching card that provides 200 MHz bandwidth and offers four groups of 1x4 multiplexer scanners.

FEATURES

In each multiplexer group of the GX6021, each channel can be connected to any of the other four channels in its group. Additional relays connect adjacent groups. Using these additional relays, larger groups can be formed such as 2 x 1:9, or 1 x 1:19. The GX6021 groups can be software configured to provide switch paths that maintain 200 MHz bandwidth.

SOFTWARE

The GX6021 is supplied with a virtual instrument panel, which includes the 32-bit DLL driver libraries and documentation. The virtual panel can be used to interactively adjust and control the instrument from a window that displays the current instrument settings and measurements.

In addition, various interface files provide access to the library for programming tools and languages such as ATEasy, LabVIEW, Microsoft® and Borland® C/C++, Microsoft Visual Basic®, Borland Delphi, and more.

APPLICATIONS

- Automatic Test Equipment (ATE)
- Parametric measurements
- Engineering verification
- High density switching systems
- RF communications

GX6021 SERIES

SPECIFICATIONS

| CONTACT SPECIFICATIONS | |
|---|--|
| RELAY FORMAT | 20 channel |
| RELAY CONTACT RESISTANCE | <0.2 Ω |
| SWITCHABLE VOLTAGE, MAXIMUM | 200 V _{DC} resistive load |
| SWITCHABLE CURRENT | 0.5 A resistive load |
| CONTACT CARRY CURRENT | 1 A resistive load |
| OPERATE TIME | 6 ms (Max.) |
| RELEASE TIME | 3 ms (Max.) |
| RF SPECIFICATIONS | |
| IMPEDANCE | 50 Ω |
| BANDWIDTH | >200 MHz (-3 dB) |
| INSERTION LOSS | <0.7 dB at 100 MHz |
| CROSSTALK ACROSS GROUPS (50-OHM TERMINATOR) | 10 MHz <-40 dB 100 MHz <-40 dB 200 MHz <-35 dB |
| ISOLATION BETWEEN CHANNELS (50-OHM TERMINATOR) | 10 MHz <-40 dB 100 MHz <-40 dB 200 MHz <-35 dB |
| VSWR (50-OHM TERMINATOR) | 1.2 : 1 at 100 MHz |
| POWER REQUIREMENTS | |
| POWER CONSUMPTION +3.3 V +5 V | 100 mA (Max.) 1 A |
| OPERATING VOLTAGE | +5 V _{DC} |
| ENVIRONMENTAL | |
| OPERATING TEMPERATURE | -0° to +50° C |
| STORAGE TEMPERATURE | -20° C to +70° C |
| VIBRATION | 5 g at 500 Hz |
| SHOCK ½ SINE | 5 G for 6 mS |
| PHYSICAL | |
| SIZE | 3U PXI |
| WEIGHT | 510 g |

Note: Specifications are subject to change without notice.

ORDERING INFORMATION

| | |
|---------|--|
| GX6021 | 20 channel multiplexer/scanner |
| GT96403 | Mating coax connector and 20 coax pins |
| GT96404 | Mating coax connector and 20 coax pins crimped (one end) to 3 foot wires |
| GT96405 | Mating coax connector and 20 coax pins crimped (both ends) to 3 foot wires |
| GT96406 | Mating coax connector and 20 coax pins crimped to 3 foot wires with BNC connectors |
| GT96407 | MMS pin extraction tool |
| GT96408 | Burndy pin extraction tool |
| GT96402 | Extra relay for GX6021 |

PIN ASSIGNMENT

| RELAYS CONNECTOR | | | |
|------------------|----|----|------|
| Ch1 | 1 | 11 | Ch11 |
| Ch2 | 2 | 12 | Ch12 |
| Ch3 | 3 | 13 | Ch13 |
| Ch4 | 4 | 14 | Ch14 |
| Ch5 | 5 | 15 | Ch15 |
| Ch6 | 6 | 16 | Ch16 |
| Ch8 | 7 | 17 | Ch17 |
| Ch8 | 8 | 18 | Ch18 |
| Ch9 | 9 | 19 | Ch19 |
| Ch10 | 10 | 20 | Ch20 |