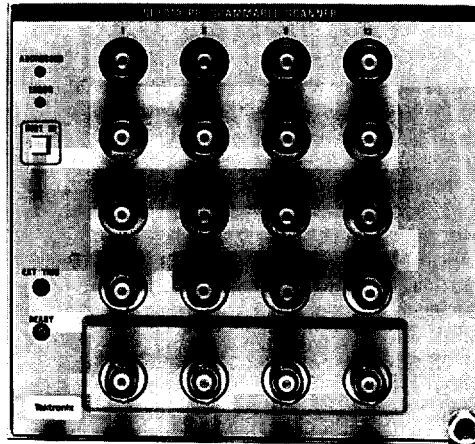




SI 5010

The SI 5010 Programmable Scanner switches and routes up to 16 high-frequency input and/or output signals. It maintains a clean 50 Ω environment through the use of 50 Ω coaxial reed relays. The software-configurable basic four-channel arrangement allows the SI 5010 to be used for point-to-point switching (any connector to any other connector), or to be used in a wide variety of fan-in and/or fan-out configurations.

The SI 5010 has a built-in command buffer capable of storing up to 300 GPIB system commands and executing them in sequence. It is paced by the on-board time-of-day and pacing clock or by signals from the system under test. This requires no interference from the system controller, thus freeing the controller to direct activity elsewhere in the system. TTL compatible handshake lines are provided for externally controlling the SI 5010.



CHARACTERISTICS

RF Connectors – 20 BNC connectors, 16 channels and four commons.

Control Input (Ext Trig) – TTL compatible.

Control Output Data Accepted (Ready) – TTL compatible. Output goes high when relays have settled.

Channel Configuration (Software Selectable) – 1, 2, 3, or 4 groups of 4 channels. 2 groups of 8 channels. 1 group of 16 channels.

Frequency Response – Any 1 Group of 4: 3 dB at 350 MHz, decreasing to 6 dB at 500 MHz or greater. Any 1 Group of 8: 3 dB at 175 MHz or greater. Any 1 Group of 16: 3 dB at 80 MHz or greater.

Port (Channel) Isolation – 40 dB at 100 MHz.

Characteristic Impedance (Each Channel) – 50 Ω . See VSWR specification.

Rise Time (Each Channel) – 1 ns.

Voltage Standing Wave Ratio (VSWR) – Any 4 Channel Group: 1.25:1 at 100 MHz, increasing to 1.8:1 at 350 MHz. Any Other Combination: 1.5:1 at 100 MHz. 2:1 at 225 MHz.

Insertion Loss – 1 dB at 100 MHz.

Channel Delay Matching – Any Group of 4: 50 ps. Any Group of 8: 110 ps. Any Group of 16: 310 ps.

Type of Relays – 16 Form A, 4 Form "C". Pull-In Time: 3 ms. Release Time: 3 ms. Breakdown Voltage: 350 V (dc + peak ac). Series Path Resistance (End of Life): 0.5 Ω .

Peak Carry Voltage – unterminated: 40 V maximum. 50 Ω Terminated: 12.5 V maximum.

Peak Contact Current – 0.25 A maximum.

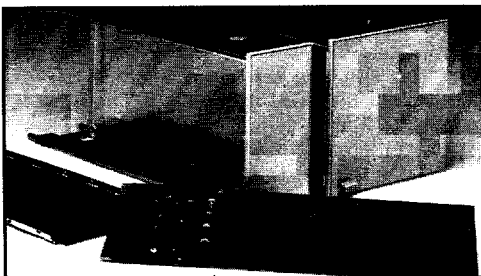
Peak Switching Voltages – unterminated: 15 V maximum. 50 Ω Terminated: 3.73 V maximum.

Peak Switching Current – 0.01 A maximum.

CUSTOM PLUG-IN KITS

SINGLE COMPARTMENT WITH POWER SUPPLY BOARD (040-0803-02)

The kit includes parts and a pre-etched circuit board layout for (1) a ground-referenced positive and negative supply, capable of 7 to 20 V at up to 400 mA, and (2) a ground-reference supply, nominally 5 V, not adjustable, with up to 1 amp current capability. The circuit board includes the edge-connector interface and has about 30 square inches of 0.1" grid perforated board with plated holes for circuit development (see below).



SINGLE COMPARTMENT WITH DEVELOPMENT BOARD (040-0652-05)

This kit comes without the power supply components or the pre-etched power supply circuit. The board includes the edge-connector interface and has about 35 square inches of board development area.

SINGLE COMPARTMENT WITHOUT BOARD (040-0821-03)

This kit comes without a board for applications where custom circuit boards are fabricated.

DUAL COMPARTMENT WITH DEVELOPMENT BOARDS (040-0754-07)

This kit has two development boards (30 and 35 square inches of development area) for applications requiring additional power, circuit area, or front panel space.

SI 5010 Programmable Scanner/Multiplexer

- Command Buffer for Controller-Free Operation
- Software configurable as:
 - 1 Group of 16 Channels
 - 2 Groups of 8 Channels
 - 4 Groups of 4 Channels
- 350 MHz Bandwidth in 4-Channel Configuration
- External Handshake Lines
- Built-In Time-of-Day and Pacing Clock

ORDERING INFORMATION

SI 5010 Programmable Scanner \$2,750
Includes: Instruction manual (070-3721-00); Instrument interface guide; Reference guide.

RECOMMENDED PROBES

P6156 – 10X Passive	\$255
P6156 Opt. 28 – 100X Passive	\$315
P6202A – FET	\$825
P6230 – Bias/Offset	\$525



ORDERING INFORMATION

Single Compartment with Power Supply Board – Order 040-0803-03	\$160
Single Compartment with Uncommitted Board – Order 040-0652-06	\$135
Single Compartment Without Board – Order 040-0821-04	\$70
Double Compartment with Two Boards – Order 040-0754-07	\$260
Rear-Interface Data Book – Order 070-2088-04	\$27
Flexible Extender Cable – Order 067-0645-02	\$470

*The SI 5010 complies with IEEE Standard 488.1-1987, and with Tektronix Standard Codes and Formats.