

708A

- Requires just 3½" of rack space
- Card accessible from either front or rear panel
- Front panel relay status display
- Control up to 96 channels of 2-pole switching (expandable to 480)
- Compatible with a wide range of switch cards

Ordering Information

708A Switching Matrix

Accessories Supplied
Relay test connector
Fixed rack mount hardware

ACCESSORIES AVAILABLE

7078-PEN Programming Light Pen (includes holder)

CABLES, ADAPTERS

7007-1 Double Shielded Premium GPIB Cable, 1m (3.3 ft)
7007-2 Double Shielded Premium GPIB Cable, 2m (6.6 ft)
7051-2 BNC-to-BNC Cable, 0.6m (2 ft)
7051-5 BNC-to-BNC Cable, 1.5m (5 ft)
8501-1 8-pin DIN Cable (Master/Slave), 1m (3.3 ft)
KPCI-488LPA IEEE-488 Interface/Controller for the PCI Bus
KUSB-488A IEEE-488 USB-to-GPIB Interface Adapter

SERVICES AVAILABLE

708A-3Y-EW 1-year factory warranty extended to 3 years from date of shipment

Switching Matrix Mainframe

Single-Slot with Fixed Rack Kit



The high-density single-slot Model 708A Switching Matrix builds upon the strengths of the original Model 708 to offer even greater capabilities for production testing in industrial environments. For example, the Model 708A requires only 3½ inches of vertical space in a standard 19-inch rack, so it's easy to fit into virtually any testing setup.

The Model 708A is compatible with all existing DC and RF switch cards for the Model 707A. This card line offers both general-purpose and application-specific cards for use in semiconductor and telecommunications testing. The Model 708A can control up to 96 channels (expandable to 480) from the front panel to simplify test development. Sixteen channels of digital I/O allow the operator to control and read-back the state of other equipment in the production test system.

OVERVIEW

CARD INSTALLATION: Configurable for front or rear installation.

CAPACITY: One plug-in card per mainframe.

EXPANSION CAPACITY: Daisy-chain expansion of up to four Slave units with one Master unit.

ANALOG BACKPLANES: Connections provided for user-supplied cable. Provides automatic row expansions between 7071, 7071-4, and 7075 cards in separate 708A mainframes.

DISPLAY: Crosspoint and IEEE-488 bus status.

MEMORY: Storage for 100 matrix setups, lithium battery backup.

PROGRAMMED SETTTLING TIME: 0 to 65 seconds in 1ms increments.

FRONT PANEL CONTROL: Crosspoint Control, Factory Default, Open, and Digital I/O.

TRIGGER SOURCES: External Trigger (TTL compatible, programmable edge, 600ns minimum pulse width); IEEE-488 bus (TALK, GET, "X"); manual.

STATUS OUTPUT: Matrix Ready (TTL compatible programmable high or low true); goes false when relays are switched, true at end of Programmed Settling Time.

MAKE-BEFORE-BREAK, BREAK-BEFORE-MAKE: Programmable by row.

LIGHT PEN OPTION: Controls crosspoints.

RELAY DRIVE: 5A.

EXECUTION SPEED

MAXIMUM TRIGGER RATE: 200 setups per second (stepping through previously stored setups with make-before-break and break-before-make disabled).

TRIGGER RESPONSE TIME: External trigger: <1ms.
IEEE-488 GET: <1ms.

RESPONSE TO IEEE-488 COMMAND (to close a single relay, excluding relay settling time):

Standalone: <15ms.

Master and Four Slaves: <55ms.

Download Time (one setup): 50ms typical.

DIGITAL I/O

OUTPUTS:

CONFIGURATION: 16 open collector drivers with factory-installed 10kΩ pull-up resistors. Each driver has internal flyback diodes.

PULL-UP VOLTAGE: 5V @ 65mA internally supplied. External connection provided for user supplied voltage 40V max.

MAXIMUM SINK CURRENT: 600mA per channel. 2A max.

OUTPUT PROTECTION: Each output protected from short circuits with supply voltages up to 25V DC.

LOGIC: Negative true.

COLLECTOR-EMITTER SATURATION VOLTAGE: <200mV @ 100mA, <400mV @ 400mA, <600mV @ 600mA.

INPUTS:

CONFIGURATION: 16 inputs with internal 10kΩ pull-up resistor.

MAXIMUM VOLTAGE LEVEL: 42V peak.

LOGIC: Positive true logic.

GENERAL

REAR PANEL CONNECTORS:

Two BNC: External Trigger, Matrix Ready.

Two DB-25: Digital I/O.

Two 8-pin DIN: Master/Slave In, Master/Slave Out.

EMC: Conforms with European Union Directive 89/336/EEC EN 55011, EN 50082-1, EN 61000-3-3, FCC part 15 class B.

SAFETY: Conforms with European Union Directive 73/23/EEC EN 61010-1.

ENVIRONMENTAL: OPERATING: 0° to 50°C, <80% RH (0° to 35°C). **STORAGE:** -25° to 65°C.

POWER: 100-240V AC, 50-60Hz, 110VA maximum.

RELAY DRIVE: 5A.

DIMENSIONS: 90mm high × 433mm wide × 570mm deep (3.5 in × 17 in × 22.4 in).

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