

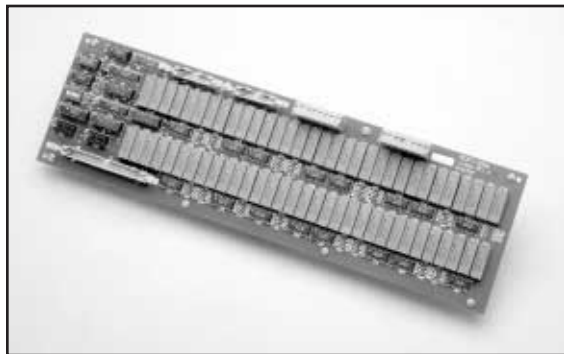
MCPT-8X8

Crosspoint Matrix Relay Board For the METRABUS

Functional Description

The MCPT-8X8 is a 64 point I/O relay board for the METRABUS. It consists of an 8 × 8 array of single pole (form A) mercury amalgam contact reed relays (non-position sensitive). The industrially-rated reed relays have a minimum life of 10 million operations at full rated load (200 VDC @ 0.5 Amps, max) assuring reliable, multi-point switching for even the most demanding applications. Total operate and release time of 2 ms (max) with maximum contact resistance of 50 MΩ provides high-speed switching capability with minimal loss of signal. The relays can be programmed to connect a single X column to any combination of Y0–Y7 rows. A single Y row can be programmed to connect to any combination of X0–X7 columns. The 64 relays are not each independently addressable. They can only be addressed by their row or column. As with all METRABUS boards, data is latched when written to the MCPT-8X8 and can be read back for data verification and program development. Upon power-up and METRABUS CLEAR, all relays are cleared to the open state.

The MCPT-8X8 uses 2 consecutive addresses on the METRABUS allowing a maximum of 32 separately addressable MCPT-8X8 boards from a single METRABUS interface board. Additionally, any number of boards can be assigned the same board address, providing 2, 3 or N pole switches. Relay matrices can, therefore, be expanded in a linear (1 dimension), cartesian (2 dimensions) or geometric (3 dimensions) fashion creating versatile, multi-dimensional input and control schemes.



Removable screw terminals on the MCPT-8X8 offer easy signal connection and interchange. The terminals accept 12 – 22 AWG wire. The MCPT-8X8 can be mounted in a standard 19-inch rack mount (such as Keithley's model RMT-02) or in standard enclosures.

FEATURES

- Up to 32 MCPT-8X8 (2048 I/O points) separately addressable boards per system
- Expansion to multi-dimensional operation (1, 2, or 3 dimensions)
- Stacked expansion for multipole operation
- Relay contacts rated for 200 Vdc @ 0.5 Amps
- Relays rated for 10 million operations at full load
- Removable screw terminal block for easy signal hook-up

APPLICATIONS

- Relay control
- Electronic test
- Multipoint energy management
- Alarm activation
- Signal multiplexing
- Lighting control
- Process and production control

SPECIFICATIONS

METRABUS ADDRESS SPACE

2 consecutive addresses

POWER REQUIREMENTS

+5V: 200mA max (+20mA/active relay)

±15V: not used

PHYSICAL

DIMENSIONS: 16in L × 4.75in W (40.63cm L × 12.05cm W)

OPERATING TEMP.: 0 to 70°C

STORAGE TEMP.: -20 to 100°C

HUMIDITY: 0 to 90% non-condensing

RELAYS

NUMBER OF I/O POINTS: 64 (8×8 matrix)

TYPE OF RELAY: Single pole (form A) reed type

CONTACT TYPE: Mercury amalgam (non-position sensitive)

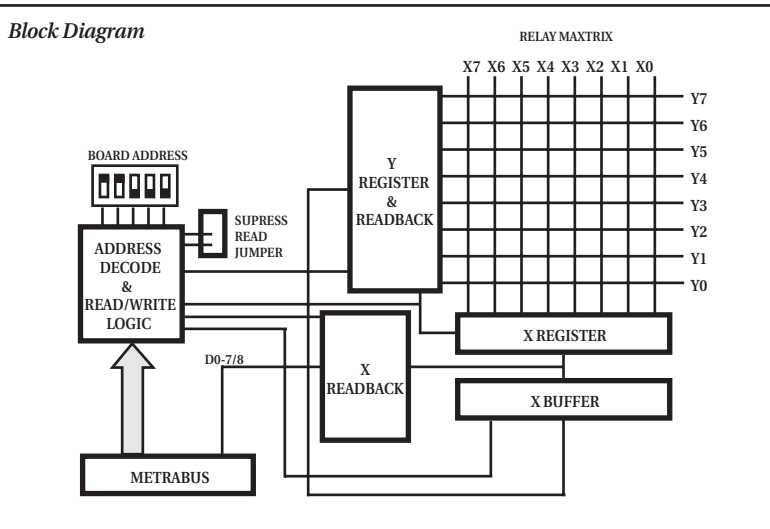
CONTACT POWER RATING: 30VDC @ 0.5 Amps max

CONTACT RESISTANCE: 50mΩ min

RELAY LIFE: 10,000,000 operations at full load

OPERATE & RELEASE TIME: 2ms max

MAXIMUM CONFIGURATION: 32 MCPT-8X8s (separately addressable)



ORDER	DESCRIPTION
MCPT-8X8	METRABUS Crosspoint Matrix Relay Board

QUESTIONS?

1-800-552-1115 (U.S. only)

Call toll free for technical assistance, product support or ordering information, or visit our website at www.keithley.com.