

7022 Matrix-Digital I/O Card

ANALOG MATRIX SPECIFICATIONS

MATRIX CONFIGURATION: 5 rows×6 columns. Jumpers can be removed to isolate any row from the backplane. Rows A–D are connected to the backplane.

CONTACT CONFIGURATION: 2-pole Form A (HI, LO).

MAXIMUM SIGNAL: 110V DC, 110V rms, 155V peak between any two inputs or chassis, 1A switched, 30VA (resistive loads).

CONTACT LIFE:

Cold Switching: 10⁸ closures.

Maximum Signal Levels: 10⁵ closures.

CHANNEL RESISTANCE (per conductor): <1.25Ω.

CONTACT POTENTIAL:

<3μV per channel contact pair

<9μV per single contact

OFFSET CURRENT: <100pA.

ACTUATION TIME: <3ms.

ISOLATION¹: Path: >10⁹Ω, <50pF

Differential: >10⁹Ω, <70pF

Common Mode: >10⁹Ω, <200pF

CROSSTALK¹ (1MHz, 50Ω Load): <-40dB.

INSERTION LOSS¹ (50Ω Source, 50Ω Load): <0.25dB below 1MHz, <3dB below 10MHz.

RELAY DRIVE CURRENT (per relay): 16mA.

¹ Specifications apply with no more than one crosspoint closed.

DIGITAL I/O SPECIFICATIONS

DIGITAL I/O CAPABILITY: 10 independent inputs. 10 independent outputs.

OUTPUT:

Configuration: 10 open-collector drivers with factory installed 10kΩ pull-up resistors. Each driver has an internal flyback diode.

Pull-Up Voltage: 5V internally supplied, external connection provided for user supplied voltage up to 42V max. Outputs short circuit protected up to 25V.

Maximum Sink Current: Per Channel: 250mA. **Per Card:** 1A.

Logic: Hardware user configurable for negative or positive true logic levels.

INPUT:

Configuration: 10 inputs with internal 10kΩ pull-up resistors provided. Input resistors can be set for pull-up or pull-down configuration.

MAXIMUM VOLTAGE LEVEL: 42V peak.

LOGIC: Positive true.

GENERAL

CONNECTOR TYPE: 96-pin male DIN connector (7011-KIT-R mating connector included).

ENVIRONMENT:

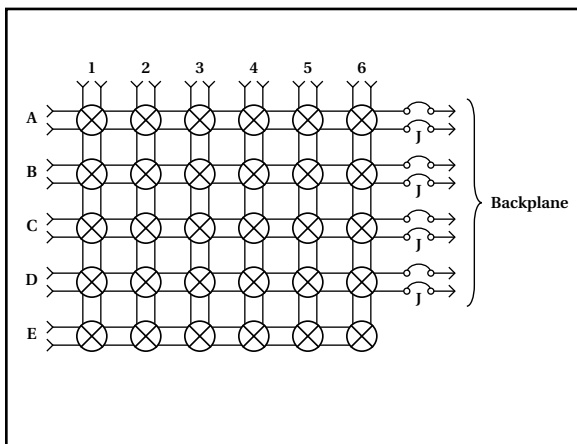
Operating: 0° to 50°C, up to 35°C <80% RH.

Storage: -25° to 65°C.

EMC: Conforms to European Union Directive 89/336/EEC.

SAFETY: Conforms to European Union Directive 73/23/EEC (meets EN61010-1/IEC 1010).

Matrix Configuration



Digital I/O Configuration

