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**Data Sheet**

August 13, 2026

KEITHLEY

## Keithley 7071-4

Keithley 7071-4 Dual 4×12 General Purpose Matrix Card The 7071-4 is a dual 4×12 three-pole (Hi, Lo, Guard) general-purpose matrix card for 707A/708A (and 707/708) mainframes. Jumpers to the analog backplane allow automatic card-to-card expansion; jumpers may be removed or repositioned to build 8×12 or 4×24. 38-pin mass-terminated connectors plus screw terminals on rows are provided. Maximum 200 V, 1 A carry / 0.5 A switched, 10 VA. Five 707A mainframes can expand to 720 columns in literature. Guarded 3-pole general-purpose matrices; expanding 707A column count; 4×24 or dual 4×12 fixtures; 7078-MTC mass-terminated cables with 7078-KIT/MTR. The 7071-4 is a dual 4×12 three-pole (Hi, Lo, Guard) general-purpose matrix card for 707A/708A (and 707/708) mainframes. Jumpers to the analog backplane allow automatic card-to-card expansion; jumpers may be removed or repositioned to build 8×12 or 4×24. 38-pin mass-terminated connectors plus screw terminals on rows are provided. Maximum 200 V, 1 A carry / 0.5 A switched, 10 VA. Five 707A mainframes can expand to 720 columns in literature. Guarded 3-pole general-purpose matrices; expanding 707A column count; 4×24 or dual 4×12 fixtures; 7078-MTC mass-terminated cables with 7078-KIT/MTR.



MODEL

**Keithley 7071-4**

CALIBRATION

**Available on request**

CONDITION

**Used**

STATUS

**In stock**

RFQ / SKU

**7071-4**

LISTING

<https://aumictechlabs.com/products/7071-4-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

**This unit**

The Keithley 7071-4 is a Dual 4×12 General Purpose Matrix Card that expands the switching capabilities of Keithley 707A and 708A mainframes. This card enables column expansion up to 720 columns across five 707A mainframes through two independent banks of four signal paths. The matrix configuration supports Dual 4×12, 8×12, or 4×24 arrangements via removable jumpers for segment isolation or reconfiguration. Each crosspoint features 3-pole Form A switching (HI, LO, GUARD) with screw terminals on rows and quick-disconnect 38-pin connectors for column connections. Technical Specifications Matrix Configuration: Dual 4 rows × 12 columns; configurable as 8 rows × 12 columns or 4 rows × 24 columns Crosspoint Type: 3-pole Form A (HI, LO, GUARD) Maximum Signal Level: 200 V, 1 A carry / 0.5 A switched, 10 VA peak (resistive load) Common Mode Voltage: 200 V maximum between any 2 pins or chassis Contact Life: 10<sup>8</sup> closures (cold switching); 10<sup>5</sup> closures (at maximum signal level) Path Resistance: <0.6 Ω initial; <1.5 Ω at end of contact life Contact Potential: <5 μV per crosspoint (HI to LO, <1 minute after actuation) Offset Current: 10<sup>10</sup> Ω with <10 pF; Differential 10<sup>12</sup> Ω, 45 pF nominal; Common Mode 10<sup>12</sup> Ω, 300 pF nominal Crosstalk: ←45 dB at 1 MHz, 50 Ω load Insertion Loss: 0.1 dB typical (1 MHz, 50 Ω source, 50 Ω load) 3 dB Bandwidth: 5 MHz typical (50 Ω load) Relay Settling Time: <3 msec Relay Drive Current: 15 mA per crosspoint Operating Temperature: 0° to 50°C (up to 35°C at 70% R.H.) Storage Temperature: -25° to 65°C Key Features Quick-disconnect 38-pin connectors for column connections; screw terminals on rows Jumper-configurable architecture for custom matrix topologies Two mass-terminated cable options (1.5 m and 6 m lengths) with shielded twisted pair construction for noise immunity Bulkhead mount receptacle available for panel integration Conforms to EU Directive 89/336/EEC (EMC) and 73/23/EEC (Safety, EN61010-1/IEC 1010) Typical Applications General-purpose signal routing and switching in automated test environments requiring multi-channel matrix expansion and low-noise analog signal paths. Compatibility & Integration Mainframes: Keithley 707A, 708A Accessories: Model 7078-MTC-5 (1.5 m cable), 7078-MTC-20 (6 m cable), 7078-MTR (bulkhead receptacle), 7078-KIT (custom connector kit)

## 7071 Characteristics / Specifications

| PARAMETER                   | VALUE                                                                       |
|-----------------------------|-----------------------------------------------------------------------------|
| Model                       | 7071-4                                                                      |
| Manufacturer                | Keithley Instruments                                                        |
| Instrument Type             | Dual 4×12 general purpose matrix card                                       |
| Alias                       | 7071-4; 70714                                                               |
| Host mainframes             | 707, 707A, 708, 708A (B-list notes differ)                                  |
| Matrix configuration        | dual 4 rows by 12 columns                                                   |
| Alternate configuration     | 8×12 or 4×24                                                                |
| Crosspoint configuration    | 3 pole Form A (Hi, Lo, Guard)                                               |
| Crosspoint count            | 96 (dual 4×12)                                                              |
| Connector                   | 38-pin mass terminated; screw terminals on rows                             |
| Maximum signal              | 200 V, 1 A carry / 0.5 A switched, 10 VA peak resistive                     |
| Common mode voltage         | 200 V max between any two pins or chassis                                   |
| Contact life cold           | 1E8 closures                                                                |
| Contact life max signal     | 1E5 closures                                                                |
| Path resistance initial     | less than 0.6 ohm per conductor                                             |
| Path resistance end of life | less than 1.5 ohm                                                           |
| Contact potential           | less than 5 uV per crosspoint Hi to Lo (less than 1 minute after actuation) |
| Offset current              | less than 100 pA Hi to Lo                                                   |
| Path isolation              | greater than 1E10 ohm, less than 10 pF                                      |
| Differential isolation      | 1E9 ohm, 45 pF nominal                                                      |
| Common mode isolation       | 1E9 ohm, 300 pF nominal                                                     |
| Crosstalk                   | less than -45 dB at 1 MHz, 50 ohm load                                      |
| Insertion loss              | 0.1 dB typical at 1 MHz, 50 ohm                                             |
| Bandwidth 3 dB              | 5 MHz typical, 50 ohm load                                                  |
| Relay settling              | less than 3 ms                                                              |

| PARAMETER   | VALUE                                                                                                                                                                                                                    |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operating   | 0 C to 50 C, 70% RH to 35 C                                                                                                                                                                                              |
| Storage     | -25 C to 65 C                                                                                                                                                                                                            |
| Accessories | 7078-MTC, 7078-KIT, 7078-MTR, 7078-CIT, 7078-HCT                                                                                                                                                                         |
| Related 8x  | Model 7071 single 8×12 3-pole Notes Specs from Keithley 7071-4 dual 4×12 general purpose matrix card data sheet. Confirm 707B/708B card-support list if installing inaBmainframe. Not the 7072 semiconductor triax card. |
| Bandwidth   | Technical Specifications                                                                                                                                                                                                 |

# Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

| Specifications           |                                                         |
|--------------------------|---------------------------------------------------------|
| Specifications           |                                                         |
| PARAMETER                | VALUE                                                   |
| Model                    | 7071-4                                                  |
| Manufacturer             | Keithley Instruments                                    |
| Instrument Type          | Dual 4x12 general purpose matrix card                   |
| Specifications           |                                                         |
| PARAMETER                | VALUE                                                   |
| Alias                    | 7071-4; 70714                                           |
| Host mainframes          | 707, 707A, 708, 708A (B-list notes differ)              |
| Matrix configuration     | dual 4 rows by 12 columns                               |
| Specifications           |                                                         |
| PARAMETER                | VALUE                                                   |
| Alternate configuration  | 8×12 or 4×24                                            |
| Crosspoint configuration | 3 pole Form A (Hi, Lo, Guard)                           |
| Crosspoint count         | 96 (dual 4×12)                                          |
| Specifications           |                                                         |
| PARAMETER                | VALUE                                                   |
| Connector                | 38-pin mass terminated; screw terminals on rows         |
| Maximum signal           | 200 V, 1 A carry / 0.5 A switched, 10 VA peak resistive |
| Common mode voltage      | 200 V max between any two pins or chassis               |
| Specifications           |                                                         |
| PARAMETER                | VALUE                                                   |
| Contact life cold        | 1E8 closures                                            |
| Contact life max signal  | 1E5 closures                                            |
| Path resistance initial  | less than 0.6 ohm per conductor                         |

### Specifications

| PARAMETER                   | VALUE                                                                       |
|-----------------------------|-----------------------------------------------------------------------------|
| Path resistance end of life | less than 1.5 ohm                                                           |
| Contact potential           | less than 5 uV per crosspoint Hi to Lo (less than 1 minute after actuation) |
| Offset current              | less than 100 pA Hi to Lo                                                   |

### Specifications

| PARAMETER              | VALUE                                  |
|------------------------|----------------------------------------|
| Path isolation         | greater than 1E10 ohm, less than 10 pF |
| Differential isolation | 1E9 ohm, 45 pF nominal                 |
| Common mode isolation  | 1E9 ohm, 300 pF nominal                |

### Specifications

| PARAMETER      | VALUE                                  |
|----------------|----------------------------------------|
| Crosstalk      | less than -45 dB at 1 MHz, 50 ohm load |
| Insertion loss | 0.1 dB typical at 1 MHz, 50 ohm        |
| Bandwidth 3 dB | 5 MHz typical, 50 ohm load             |

### Specifications

| PARAMETER      | VALUE                       |
|----------------|-----------------------------|
| Relay settling | less than 3 ms              |
| Operating      | 0 C to 50 C, 70% RH to 35 C |
| Storage        | -25 C to 65 C               |

Accessories: 7078-MTC, 7078-KIT, 7078-MTR, 7078-CIT, 7078-HCT

Related 8x12: Model 7071 single 8x12 3-pole

#### Notes

Specs from Keithley 7071-4 dual 4x12 general purpose matrix card data sheet. Confirm 707B/708B card-support list if installing inaBmainframe. Not the 7072 semiconductor triax card.

### Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: [sales@aumictech.com](mailto:sales@aumictech.com) · +1 (484) 841-9341

#### Aumictech

788 S 500 E, Pleasant Grove, UT 84062  
[sales@aumictech.com](mailto:sales@aumictech.com) · +1 (484) 841-9341  
<https://aumictechlabs.com>

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.