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Data Sheet

August 13, 2026

KEITHLEY

Keithley 7012-S / 7012S

Keithley Modular Instrument Chassis. Current: 16 mA per relay, Voltage: 175 V peak (any pin to chassis), Current: $10^9 \Omega$.



MODEL

Keithley 7012-S / 7012S

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

7012-S / 7012S

LISTING

<https://aumictechlabs.com/products/7012-s-7012s-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keithley 7012-S is a 4×10 matrix switching card delivering two-pole, dual-matrix expansion for the Keithley 7001 and 7002 switch mainframes. This screw-terminal card routes signals with minimal contact potential and offset current, making it ideal for precision analog switching in test systems requiring low-noise signal integrity. Technical Specifications Matrix & Switching Configuration: 4 rows × 10 columns Contact type: 2-pole Form A (Hi, Lo) Channel resistance: < 1 Ω per conductor Actuation time: 3 ms Relay drive current: 16 mA per relay Signal Handling DC signals: 110 V DC, 1 A switched; 30 VA resistive load maximum AC signals: 125 V RMS or 175 V AC peak, 1 A switched; 60 VA resistive load maximum Common mode voltage: 175 V peak (any pin to chassis) Contact potential: < 500 nV per contact pair Offset current: $10^9 \Omega$, $10^9 \Omega$, $10^9 \Omega$, < 400 pF Crosstalk at 1 MHz (50 Ω load): < -40 dB Insertion loss: < 0.1 dB below 1 MHz; < 3 dB below 2 MHz (50 Ω source/load) Reliability Cold switching contact life: 10^8 closures Contact life at maximum signal levels: 10^5 closures Connectors & Wiring Screw terminal connections support #16 AWG maximum (0.092 inch O.D., up to 28 conductors) or #22 AWG typical (0.062 inch O.D., up to

88 conductors) Environmental Operating: 0°C to 50°C, up to 35°C < 80% RH Storage: -25°C to 65°C EMC: EU Directive 89/336/EEC Safety: EU Directive 73/23/EEC (EN61010-1/IEC 1010) Key Features Low contact potential and offset current minimize measurement errors in sensitive analog circuits Flexible wiring options via screw terminals for direct circuit integration High isolation and low crosstalk ensure signal fidelity in multi-channel test setups Substantial contact life under cold-switch conditions supports high-volume test applications Typical Applications Precision analog signal routing and multiplexing Multi-channel data acquisition and test automation Matrix expansion in automated test equipment (ATE) Compatibility & Integration Integrates with Keithley 7001 and 7002 switch mainframes. Rows connect to the analog backplane for matrix expandability. Compatible with Keithley 7011 multiplexer card for row expansion.

7012S7012S Characteristics / Specifications

PARAMETER	VALUE
Model	7012-S
Manufacturer	Keithley Instruments
Instrument Type	4×10 matrix card screw terminal
Alias	7012S; 7012-S
Host Mainframes	7001 and 7002
Matrix Configuration	4 rows by 10 columns
Contact Configuration	2 pole Form A (Hi, Lo)
Connector	screw terminal
Wire Size Max 16 AWG	0.092 inch OD, 28 conductors maximum
Wire Size Typical 22 AWG	0.062 inch OD, 88 conductors maximum
Maximum DC Signal	110 V DC between any two pins, 1 A switched, 30 VA resistive
Maximum AC Signal	125 V RMS or 175 V AC peak, 1 A switched, 60 VA resistive
Common Mode Voltage	175 V peak any pin to chassis
Contact Life Cold	1E8 closures
Contact Life Max Signal	1E5 closures
Channel Resistance	less than 1 ohm per conductor
Contact Potential Pair	less than 500 nV per Hi/Lo pair
Contact Potential Single	less than 1.5 uV
Offset Current	less than 100 pA
Actuation Time	3 ms
Path Isolation	greater than 1E9 ohm, less than 50 pF
Differential Isolation	greater than 1E9 ohm, less than 200 pF
Common Mode Isolation	greater than 1E9 ohm, less than 400 pF
Crosstalk 1 MHz 50 ohm	less than -40 dB
Insertion Loss	less than 0.1 dB below 1 MHz, less than 3 dB below 2 MHz

PARAMETER	VALUE
Relay Drive Current	16 mA per relay
Operating	0 C to 50 C, up to 35 C less than 80 percent RH
Storage	-25 C to 65 C
Related Mass Terminated	7012-C (less than 1 uV pair)
Backplane	rows connect unless jumpers removed

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	
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Common Mode Isolation	greater than 1E9 ohm, less than 400 pF
Crosstalk 1 MHz 50 ohm	less than -40 dB
Insertion Loss	less than 0.1 dB below 1 MHz, less than 3 dB below 2 MHz
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Backplane	rows connect unless jumpers removed

Notes
Specs from Keithley Models 7012-S and 7012-C 4x10 matrix card instruction manual. ConfirmSversusCconnector.
Not a 7071 8x12 semiconductor matrix card.

Available from Aumictech

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

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

Aumictech

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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.