

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 13, 2026

KEITHLEY

Keithley 7012C

Keithley 7012C 4×10 Matrix Card Mass Terminated The 7012-C (7012C) is a 4-row by 10-column two-pole matrix card for 7001/7002 mainframes. Rows connect to the analog backplane unless jumpers are removed. TheCversion uses a 96-pin male Eurocard/DIN mass-terminated connector. Signal ratings are 110 V DC / 1 A / 60 VA with less than 1 uV pair contact potential, less than 100 pA offset, and 2 MHz insertion-loss class. 4×10 instrument-to-DUT matrix in 7001/7002; cascading rows via backplane; production mass-terminated wiring with 7011-MTC cables. The 7012-C (7012C) is a 4-row by 10-column two-pole matrix card for 7001/7002 mainframes. Rows connect to the analog backplane unless jumpers are removed. TheCversion uses a 96-pin male Eurocard/DIN mass-terminated connector. Signal ratings are 110 V DC / 1 A / 60 VA with less than 1 uV pair contact potential, less than 100 pA offset, and 2 MHz insertion-loss class. 4×10 instrument-to-DUT matrix in 7001/7002; cascading rows via backplane; production mass-terminated wiring with 7011-MTC cables.



MODEL

Keithley 7012C

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

7012C

LISTING

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

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keithley 7012C is a 4×10 matrix switching card engineered for signal routing within Keithley 7001 and 7002 switch mainframes. Built around a 2-pole Form A (Hi, Lo) contact configuration, this card delivers precision switching for sensitive measurement environments while minimizing signal degradation and crosstalk. The card connects via a 96-pin male Euro card connector and

supports DC signals up to 110V at 1A (30VA resistive load) and AC signals up to 125V RMS or 175V peak at 1A (60VA resistive load). With contact potential below 1 μ V per pair and channel resistance under 1 Ω per conductor, the 7012C maintains signal integrity across demanding applications. Isolation exceeds $10^9 \Omega$ across all paths, while crosstalk performance reaches -40 dB at 1 MHz with a 50 Ω load. Technical Specifications Matrix Configuration: 4 rows $\times$ 10 columns Contact Configuration: 2-pole Form A (Hi, Lo) Connector: 96-pin male Euro card DC Signal Rating: 110V between any two pins, 1A switched, 30VA (resistive load) AC Signal Rating: 125V RMS or 175V peak between any two pins, 1A switched, 60VA (resistive load) Common Mode Voltage: 175V peak to chassis Channel Resistance: <1 Ω per conductor Contact Potential: <1 μ V per contact pair; <3 μ V per single contact Offset Current: $10^9 \Omega$, $10^9 \Omega$, $10^9 \Omega$, <400 pF Crosstalk (1 MHz, 50 Ω load): <-40 dB Insertion Loss: <0.1 dB below 1 MHz; <3 dB below 2 MHz (50 Ω source and load) Relay Drive Current: 16 mA per relay Contact Life: 10^8 closures (cold switching); 10^5 closures (at maximum signal levels) Key Features Flexible matrix routing with independent row isolation via jumper removal Low contact potential ensures accurate low-level signal measurements Rapid 3 ms actuation supports dynamic test sequences Wide signal compatibility spanning DC, audio, and low-frequency AC Typical Applications Precision data acquisition and measurement multiplexing Low-level analog signal switching Automated test and production characterization Mixed-signal DC and AC circuit validation Compatibility & Integration The 7012C operates within Keithley 7001 and 7002 switch mainframes and integrates with the 7011 multiplexer card for expanded row-switching capabilities. Rows connect to the analog backplane of the host mainframe with independent isolation control.

Features & description

From manufacturer datasheet

Features

- 4×10 two-pole FormAcrosspoints

7012C Characteristics / Specifications

PARAMETER	VALUE
Model	7012-C
Manufacturer	Keithley Instruments
Instrument Type	4×10 matrix card
Alias	7012C; 7012-C
Host mainframes	7001 and 7002
Matrix configuration	4 rows by 10 columns
Contact configuration	2 pole Form A (Hi, Lo)
Connector	96-pin male Eurocard mass terminated
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 1 uV per Hi/Lo pair
Contact potential single	less than 3 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
Relay drive current	16 mA per relay
Operating	0 C to 50 C, up to 35 C less than 80% RH

PARAMETER	VALUE
Storage	-25 C to 65 C
Related screw terminal	7012-S (less than 500 nV pair)
Accessories	7011-MTC-1, 7011-MTC-2, 7011-KIT-R
Backplane	rows connect unless jumpers removed Notes Specs from Keithley Models 7012-S and 7012-C 4×10 matrix card instruction manual. ConfirmCversusSconnector. Not a 7071 8×12 semiconductor matrix card.

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	7012-C
Manufacturer	Keithley Instruments
Instrument Type	4x10 matrix card
Specifications	
PARAMETER	VALUE
Alias	7012C; 7012-C
Host mainframes	7001 and 7002
Matrix configuration	4 rows by 10 columns
Specifications	
PARAMETER	VALUE
Contact configuration	2 pole Form A (Hi, Lo)
Connector	96-pin male Eurocard mass terminated
Maximum DC signal	110 V DC between any two pins, 1 A switched, 30 VA resistive
Specifications	
PARAMETER	VALUE
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
Specifications	
PARAMETER	VALUE
Contact life max signal	1E5 closures
Channel resistance	less than 1 ohm per conductor
Contact potential pair	less than 1 uV per Hi/Lo pair

Specifications

PARAMETER	VALUE
Contact potential single	less than 3 uV
Offset current	less than 100 pA
Actuation time	3 ms

Specifications

PARAMETER	VALUE
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

Specifications

PARAMETER	VALUE
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
Relay drive current	16 mA per relay

Specifications

PARAMETER	VALUE
Operating	0 C to 50 C, up to 35 C less than 80% RH
Storage	-25 C to 65 C
Related screw terminal	7012-S (less than 500 nV pair)

Accessories: 7011-MTC-1, 7011-MTC-2, 7011-KIT-R

Backplane: rows connect unless jumpers removed

Notes

Specs from Keithley Models 7012-S and 7012-C 4x10 matrix card instruction manual. ConfirmCversusSconnector.
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

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

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 13, 2026

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