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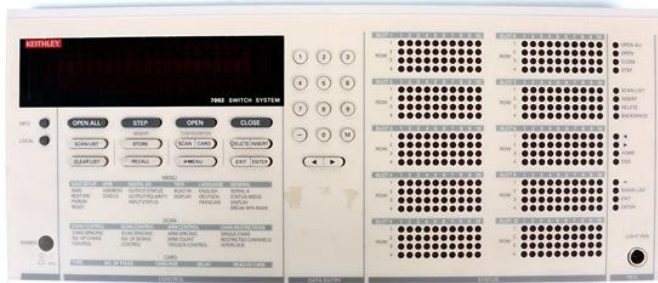
Data Sheet

August 13, 2026

KEITHLEY

Keithley 7002 400-Channel / 10-Slot Switch Mainframe

Keithley 7002 Switch Control Mainframe 10 Slot 400 Channel The Keithley 7002 is a 10-slot switch/control mainframe supporting up to 400 2-pole multiplexer channels or 400 matrix crosspoints. Interactive front-panel channel-status display (optional light pen). Scanning up to 300 channels/s with high-density cards. Fully compatible with 7001 Series 7000 cards (DC, RF, optical). Analog backplane for expansion between cards. Do not confuse with 7001 (2 slots / 80 channels) or with unrelated Thorlabs ASE-FL7002 fiber sources. The Keithley 7002 is a 10-slot switch/control mainframe supporting up to 400 2-pole multiplexer channels or 400 matrix crosspoints. Interactive front-panel channel-status display (optional light pen). Scanning up to 300 channels/s with high-density cards. Fully compatible with 7001 Series 7000 cards (DC, RF, optical). Analog backplane for expansion between cards. Do not confuse with 7001 (2 slots / 80 channels) or with unrelated Thorlabs ASE-FL7002 fiber sources. High-channel-count production switching; 400-crosspoint matrix systems; DMM/SourceMeter integration; mixed DC/RF/optical Series 7000 cards in one full-width mainframe.



MODEL

Keithley 7002

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

7002

LISTING

<https://aumictechlabs.com/products/7002-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keithley 7002 is a 400-channel switch mainframe with 10 expansion slots designed for automated test and data acquisition systems requiring sophisticated signal routing. This high-density platform delivers the flexibility and scalability necessary for complex multiplexing and signal distribution across demanding measurement applications. The mainframe accepts user-selectable Keithley switch modules, enabling configuration tailored to specific routing and isolation requirements. Engineers can program the 7002 via front-panel controls or remote interfaces to achieve precise, repeatable results in high-throughput test environments.

Technical Specifications

- Switching Capacity** Maximum channels: 400 Expansion slots: 10 Module compatibility: Accepts Keithley switch modules with user-selectable configurations
- Performance** Signal integrity optimized across all channels High-speed switching capability (switching speed, contact resistance, and isolation specifications are module-dependent) Channel-to-channel and common-to-ground isolation determined by module selection and system configuration
- Control & Interface** SCPI command support for standard Keithley control protocols Front-panel and remote programming options Status indicators for system status, slot occupancy, and error reporting
- Electrical Requirements** Input voltage: Configurable for 100 V, 120 V, 220 V, or 240 V AC (configuration-dependent) Input frequency: 50/60 Hz Power consumption: Varies by installed module count and type Internal power supplies provision power to installed switch modules

Key Features 400-channel capacity in compact 10-slot architecture Flexible module-based design for application-specific customization Low contact resistance maintained by compatible switch modules SCPI programmability for seamless ATE integration

Typical Applications Signal routing, multiplexing configurations, automated testing platforms, and data acquisition systems requiring high-channel-count switching. **Compatibility & Integration** Works with Keithley switch module ecosystem. Supports standard SCPI protocols for integration into automated test equipment environments.

7002 Characteristics / Specifications

PARAMETER	VALUE
Model	7002
Manufacturer	Keithley Instruments
Instrument Type	Switch control mainframe
Alias	7002; Model 7002
Card slots	10
Maximum two pole channels	400
Maximum matrix crosspoints	400
Scan speed class	up to 300 channels per second with high density cards
Card compatibility	all 7001 / Series 7000 cards
Switching sequence	break before make programmable
Settling delay	programmable 1.0 ms to 99999.999 s in 1.0 ms increments
Status output	Channel Ready TTL rear BNC
Channel Ready pulse	low going 10 us typical after relay settling
Mainframe digital I/O	four open collector outputs
Digital I/O voltage	30 V maximum
Digital I/O sink	100 mA maximum
Digital I/O impedance	10 ohm
Digital I/O extra	one TTL input, one common, one +5 V
Relay drive	3.5 A maximum for all 10 card slots
Card size	32 mmHx 114 mmWx 272 mmL Backplane rows: four 3 pole (Hi Lo Guard)
Backplane max voltage	250 V DC, 250 V rms, 350 V AC peak
Backplane max current	1 A peak
Path isolation	greater than 1e10 ohm, less than 50 pF path to path
Differential isolation	greater than 1e10 ohm, less than 50 pF
Path to chassis	greater than 1e9 ohm, less than 75 pF

PARAMETER	VALUE
Channel crosstalk	less than -65 dB at 1 MHz (50 ohm load)
Backplane bandwidth	less than 3 dB loss at 100 MHz
Form	10 slot mainframe
Related 70	2 slots, 80 channels
Card family	more than 30 Series 7000 switch/control cards Notes Specs from Keithley Model 7002 Switch/Control Mainframe data sheet. Confirm installed cards. Do not confuse with 7001 or with unrelated products whose model strings contain 7002.
Bandwidth	less than 3 dB loss at 100 MHz

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.

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Card family	more than 30 Series 7000 switch/control cards

Notes

Specs from Keithley Model 7002 Switch/Control Mainframe data sheet. Confirm installed cards. Do not confuse with 7001 or with unrelated products whose model strings contain 7002.

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.