

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 12, 2026

KEITHLEY

Keithley 707A Switching Matrix Mainframe

The Keithley 707A Switching Matrix Mainframe is a versatile unit designed for automated testing and signal routing applications. It accommodates a variety of plug-in cards to create custom switching configurations. Ideal for research, development, and production environments.



MODEL Keithley 707A	CALIBRATION Available on request
CONDITION Used	STATUS In stock
RFQ / SKU 707A	LISTING https://aumictechlabs.com/products/707a-2/

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keithley 707A Switching Matrix Mainframe is a modular, six-slot mainframe engineered for signal routing and automated testing in research, development, and production environments. It accommodates Keithley plug-in switch cards to build custom switching configurations while maintaining backward compatibility with Model 707 and 708 switch card designs. The system scales from a single mainframe controlling up to 576 channels to a cascaded five-unit configuration delivering 2880 channels, with daisy-chain expansion supporting up to four slave units per master. Technical Specifications Capacity & Expansion Six plug-in card slots per mainframe Up to 576 channels per single unit; 2880 channels maximum with full expansion Maximum 360-column configuration with five cascaded Model 707A mainframes Daisy-chain expansion: one master unit plus up to four slave units Analog Architecture Three separate analog backplanes optimized for different switch card types Automatic row expansion between similar cards within a single mainframe User Interface & Memory 14-segment alphanumeric LED display

with individual status LEDs Storage for up to 100 matrix setups with lithium battery backup One-touch front-panel programming: Digital I/O, External Trigger edge, Matrix Ready level, Master/Slave operation, IEEE-488 address, Relay Settling Time, Self Test, Card Identify Trigger & Control Performance Maximum trigger rate: 200 setups per second (make-before-break and break-before-make disabled) External Trigger response: <1 ms; IEEE-488 GET response: <1 ms External Trigger: TTL compatible, programmable edge, 600 ns minimum pulse width Digital I/O: 8 TTL inputs, 8 TTL outputs; Input Latch and Output Strobe control signals Matrix Ready: TTL compatible status output, programmable high or low true Make-before-break / break-before-make: programmable by row Programming & Options IEEE-488 bus control (TALK, GET, "X" command) Manual trigger capability Optional light pen control for crosspoints, memories, and switching modes; controls Master and all Slave units All parameters programmable except IEEE-488 bus address and Master/Slave mode Typical Applications Automated component test, signal multiplexing, multi-channel data acquisition, production test switching, and parametric measurement systems requiring flexible high-channel-count routing. Compatibility & Integration Full compatibility with existing Keithley Model 707 and 708 switch cards enables seamless integration into established test infrastructures.

Features & description

From manufacturer datasheet

Technical Specifications

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Keithley 707A — Repair & Calibration Service

Aumictech offers NIST-traceable calibration and repair for the Keithley 707A. All calibrations are performed to NIST-traceable standards and ship with a certificate. Turnaround is typically 1–3 business days after receipt. Standard Cal Pass/fail cert + NIST sticker Cal with Data Full NIST cert with measured values Request Calibration → Request Repair Quote →

Keithley 707A price

This Keithley 707A is listed at . Calibration is available separately from . Contact us for volume pricing or if you need multiple units.

Keithley 707A calibration cost

NIST-traceable calibration for the Keithley 707A is (standard — pass/fail certificate and calibration sticker) or (full measured data at every test point, reference standards documented, traceability chain included). Turnaround is 1 to 3 business days after receipt. See full calibration details →

Unit notes

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- Capacity & Expansion** Six plug-in card slots per mainframe Up to 576 channels per single unit; 2880 channels maximum with full expansion Maximum 360-column configuration with five cascaded Model 707A mainframes Daisy-chain expansion: one master unit plus up to four slave units
- Analog Architecture** Three separate analog backplanes optimized for different switch card types Automatic row expansion between similar cards within a single mainframe
- User Interface & Memory** 14-segment alphanumeric LED display with individual status LEDs Storage for up to 100 matrix setups with lithium battery backup One-touch front-panel programming: Digital I/O, External Trigger edge, Matrix Ready level, Master/Slave operation, IEEE-488 address, Relay Settling Time, Self Test, Card Identify
- Trigger & Control Performance** Maximum trigger rate: 200 setups per second (make-before-break and break-before-make disabled) External

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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[Request Calibration](#) → [Request Repair Quote](#) →

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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>

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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.