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Data Sheet

August 2, 2026

KEITHLEY

Keithley 7703 High Speed Differential Multiplexer

Keithley 7703 High Speed Differential Multiplexer The Keithley 7703 is a 32-channel high-speed differential multiplexer plug-in module for Keithley Integra Series mainframes (Models 2700, 2701, and 2750) and the DAQ6510 data acquisition system. It provides 32 channels of 2-pole or 16 channels of 4-pole multiplexer switching using non-latching reed relays rated for 300 V, 0.5 A, and 10 W (10 VA), with actuation time under 1 ms and dual 50-pin D-sub connectors. High-speed multi-channel scanning in production test and data acquisition; RTD and thermistor temperature measurement; 2-wire and 4-wire resistance routing; general-purpose differential signal multiplexing on Integra or DAQ6510 platforms. The Keithley 7703 is a 32-channel high-speed differential multiplexer plug-in module for Keithley Integra Series mainframes (Models 2700, 2701, and 2750) and the DAQ6510 data acquisition system. It provides 32 channels of 2-pole or 16 channels of 4-pole multiplexer switching using non-latching reed relays rated for 300 V, 0.5 A, and 10 W (10 VA), with actuation time under 1 ms and dual 50-pin D-sub connectors. High-speed multi-channel scanning in production test and data acquisition; RTD and thermistor temperature measurement; 2-wire and 4-wire resistance routing; general-purpose differential signal multiplexing on Integra or DAQ6510 platforms.

No photo

MODEL

Keithley 7703

CALIBRATION

**N/A — off-catalog
OEM datasheet**

CONDITION

**See OEM
documentation**

STATUS

**Not listed on
Aumictech
inventory**

RFQ / SKU

7703

LISTING

**Off-catalog — OEM dat
asheet only**

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

Features & description

From manufacturer datasheet

Features

- 32 channels of 2-pole or 16 channels of 4-pole switching
- Non-latching reed relays with actuation time less than 1 ms
- Two independent multiplexer banks configurable from scan lists
- Automatic 4-wire pairing (n + 16 channel topology)
- Dual 50-pin female D-sub connectors (DB50 × 2)
- Onboard relay closure memory
- Rated 300 V, 0.5 A switched, 10 W maximum per channel
- Optimized for RTD and thermistor applications

7703 Characteristics / Specifications

PARAMETER	VALUE
Model	7703
Manufacturer	Keithley (Tektronix/Keithley)
Instrument Type	High-Speed Differential Multiplexer Module
Series	7700-Series Plug-In Module
Compatible Mainframes	Keithley 2700, 2701, 2750; DAQ6510
Channels	32 × 2-pole or 16 × 4-pole
Relay Type	Non-latching reed
Actuation Time	less than 1 ms
Maximum Signal Level	300 V DC or rms; 0.5 A switched; 10 W (10 VA) maximum
Contact Resistance	less than 1 Ω at end of contact life
Contact Potential	less than ± 3 μ V typical per contact; 6 μ V max
Offset Current	less than 100 pA
Connector Type	50-pin D-sub × 2
Isolation (channel to channel)	greater than 10^9 Ω , less than 200 pF
Common Mode Voltage	300 V between any terminal and chassis
Bandwidth (insertion loss)	less than 0.35 dB below 1 MHz; less than 3 dB below 2 MHz
Weight	approximately 0.8 kg (1.75 lbs) Standard Operating Conditions Specified for 0°C to 50°C operating; up to 40% relative humidity at 35°C. Storage -25°C to 65°C. Conforms to applicable EMC, safety, and RoHS directives per Keithley documentation.
Bandwidth	(insertion loss): less than 0.35 dB below 1 MHz; less than 3 dB below 2 MHz
Humidity	at 35°C. Storage -25°C to 65°C. Conforms to applicable EMC, safety, and RoHS directives per Keithley documentation.

7703 Specifications

PARAMETER	VALUE
Keithley 7703 High Speed Differential Multiplexer	Overview
Key Features	- 32 channels of 2-pole or 16 channels of 4-pole switching
Technical Specifications	Model: 7703

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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Standard Operating Conditions	
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Operational Notes	
Relays return to open state after power removal or system reset (non-latching). Use Model 7788 50-pin D-sub connector kit for external wiring. For Integra 2700/2701/2750 operation, refer to Keithley document PA-695 (7700/7702/7703 User's Guide). Cold switching extends relay life beyond maximum-signal-level ratings.	

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: N/A — off-catalog OEM datasheet. See OEM documentation · Not listed on Aumictech inventory.

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

Aumictech

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NIST-traceable calibration · SAM registered ·
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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.