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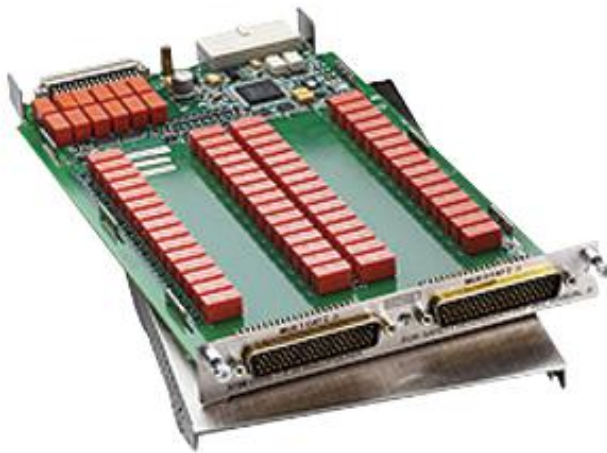
Data Sheet

August 12, 2026

KEITHLEY

Keithley 3720 Test Accessory, Multiplexer Card

The Model 3720 isaSeries 3700A multiplexer card with two independent 1×30 two-pole banks (60 differential channels). Supports 2- and 4-wire configurations, automatic CJC with 3720-ST, and backplane isolation/expansion relays. Specs from Keithley Model 3720 Dual 1×30 Multiplexer Specification. Confirm 3720-ST accessory and mainframe on the system.



MODEL

Keithley 3720

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

3720

LISTING

<https://aumictechlabs.com/products/3720-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keithley 3720 Test Accessory, Multiplexer Card is a plug-in module designed for Keithley Series 3700 and 3700A mainframe systems. It has two independent banks of 1×30 two-pole multiplexers that reconfigure to function as a single 1×60 two-pole multiplexer, 30 four-pole channels, or enable card-to-card expansion. The card employs latching electromechanical relays with relay closures stored in onboard memory, delivering scan rates exceeding 110 channels/s. Technical Specifications Channel Configuration: Dual 1×30 two-pole multiplexers (60 two-pole or 30 four-pole channels total) Switching Voltage Capacity: 300 V DC or 300 VRMS Switching Current Capacity: 1 A Carry Current Capacity: 2 A Power Dissipation: 60 W Apparent Power: 125 VA Scan Rate: >110 channels/s Temperature Measurement Accuracy (with 3720-ST): 1°C for J, K, T, and E thermocouple types Hazardous Voltage Threshold: >30 VRMS, 42.4 V PEAK, or 60 V DC Key Features Latching electromechanical relay architecture with memory-based closure retention Flexible reconfiguration supports two-pole, four-pole, and expansion modes

Two 78-pin male D-sub connectors for signal routing Backplane relays enable bank and card-to-card interconnections with interlock safety disabling Compatible with 3720-ST screw terminal block for automatic cold junction compensation in thermocouple applications Operating temperature range: 0°C to 50°C at 70% RH (35°C) RoHS compliant; conforms to EN61010-1 and EN61326-1 Typical Applications Multiplexed signal routing in automated test systems, thermocouple temperature measurement with automatic CJC, multi-channel data acquisition and switching, and modular test system expansion. Compatibility & Integration Compatible with Keithley Series 3700 and 3700A mainframe systems. Optional 3720-ST screw terminal accessory enables automatic CJC for thermocouple measurements. The 3720-MTC-3 cable assembly (3.0 m) with 78-pin D-sub connectors provides external connectivity.

Features & description

From manufacturer datasheet

Features

• Channels: 60 differential (dual 1×30 2-pole); or 30 four-pole • Contact: 2-pole Form A; latching electromechanical relays • Max signal (ch 1–60): 300 V DC or RMS; 1 A switched (2 A carry); 60 W / 125 VA • Common mode: 300 V DC or RMS any terminal to chassis • Volt-hertz limit: 8×10^7 • Contact life: $>10^5$ at max signal; $>10^8$ no load • Channel resistance (end of life): $<1.0 \Omega$ typical / $<1.5 \Omega$ max class • Contact potential: $<\pm 1 \mu\text{V}$ / $<\pm 3 \mu\text{V}$ • Offset current: $<\pm 250 \text{ pA}$ • Isolation differential: $10^9 \Omega$, 250 pF class • Crosstalk CH-CH: $<-60 \text{ dB}$ @ 300 kHz; $<-50 \text{ dB}$ @ 1 MHz; $<-25 \text{ dB}$ @ 20 MHz • Connectors: two 78-pin male D-shells; optional 3720-ST screw terminals • CJC accuracy with 3720-ST: 1 °C for J/K/T/E types (see mainframe) • Operating: 0 to 50 °C; weight ~1.2 kg class

Applications

• General-purpose switching in 3700A mainframes • Temperature measurements with 3720-ST CJC • Large multiplexed 2-/4-wire measurement systems

3720 Characteristics / Specifications

PARAMETER	VALUE
Model	3720
Manufacturer	Keithley
Instrument Type	Multiplexer Card
Alias	3720; Keithley 3720
Channels	60 differential (dual 1×30 2-pole); or 30 four-pole
Configuration	dual 1×30 2-pole
Max voltage	300 V
Max switched current	1 A
Max carry current	2 A
Max power	60 W / 125 VA
Relay type	latching electromechanical Notes Specs from Keithley Model 3720 Dual 1×30 Multiplexer Specification. Confirm 3720-ST accessory and mainframe on the system.
Contact	2-pole Form A; latching electromechanical relays
Max signal (ch 1–60)	300 V DC or RMS; 1 A switched (2 A carry); 60 W / 125 VA
Common mode	300 V DC or RMS any terminal to chassis
Volt-hertz limit	8×10^7
Contact life	$>10^5$ at max signal; $>10^8$ no load
Channel resistance (end of life)	$<1.0 \Omega$ typical / $<1.5 \Omega$ max class
Contact potential	$<\pm 1 \mu\text{V}$ / $<\pm 3 \mu\text{V}$
Offset current	$<\pm 250 \text{ pA}$
Isolation differential	$10^9 \Omega$, 250 pF class
Crosstalk CH-CH	$<-60 \text{ dB}$ @ 300 kHz; $<-50 \text{ dB}$ @ 1 MHz; $<-25 \text{ dB}$ @ 20 MHz
Connectors	two 78-pin male D-shells; optional 3720-ST screw terminals
CJC accuracy with 3720-ST	1 °C for J/K/T/E types (see mainframe)
Operating	0 to 50 °C; weight ~1.2 kg class

3720 Specifications

PARAMETER	VALUE
Keithley 3720 Dual 1×30 Multiplexer Card	Overview
Applications	- General-purpose switching in 3700A mainframes
Key Features	- Channels: 60 differential (dual 1×30 2-pole); or 30 four-pole
Technical Specifications	Model: 3720
Notes	Specs from Keithley Model 3720 Dual 1×30 Multiplexer Specification. Confirm 3720-ST accessory and mainframe on the system.

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	3720
Manufacturer	Keithley
Instrument Type	Multiplexer Card
Alias	3720; Keithley 3720

Specifications

PARAMETER	VALUE
Channels	60 differential
Configuration	dual 1×30 2-pole
Max voltage	300 V
Max switched current	1 A
Max carry current	2 A
Max power	60 W / 125 VA
Relay type	latching electromechanical

Notes

Specs from Keithley Model 3720 Dual 1×30 Multiplexer Specification. Confirm 3720-ST accessory and mainframe on the system.

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.