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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 34924A

Keysight Agilent 34924A 70 Channel Reed Multiplexer for 34980A The Keysight 34924A is a high-density reed multiplexer for the 34980A Switch/Measure mainframe. OEM 34980A datasheet 5989-1437 rates 70 two-wire or 35 four-wire channels, plus or minus 150 V peak, 0.5 A switch / 1.5 A carry, 25 MHz bandwidth at the terminal block, and 500 channel/s scanning to the internal DMM. High-density mid-voltage scanning into the 34980A internal DMM, automated functional test, and 2-wire or 4-wire resistance measurements. The Keysight 34924A is a high-density reed multiplexer for the 34980A Switch/Measure mainframe. OEM 34980A datasheet 5989-1437 rates 70 two-wire or 35 four-wire channels, plus or minus 150 V peak, 0.5 A switch / 1.5 A carry, 25 MHz bandwidth at the terminal block, and 500 channel/s scanning to the internal DMM. High-density mid-voltage scanning into the 34980A internal DMM, automated functional test, and 2-wire or 4-wire resistance measurements. Reed relays for 500 channel/s internal DMM scans Two banks of 35 channels with analog bus relays



MODEL

**Agilent / Keysight
34924A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

34924A

LISTING

<https://aumictechlabs.com/products/34924a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keysight 34924A is a 70-channel reed relay multiplexer module engineered for high-speed signal routing within the 34980A Multifunction Switch/Measure Unit mainframe. This plug-in module delivers scanning performance up to 500 channels per second, making it ideal for

automated test, data logging, and high-throughput measurement applications. The module organizes its channels into two independent banks of 35 non-latching reed switches each, with eight additional armature Analog Bus relays for flexible signal distribution to system buses.

Technical Specifications

Channel Count: 70 channels (2-wire configuration)

Switching Type: Reed relays with relay counter for life prediction

Maximum Switching Speed: 500 channels/second

Maximum Switching Voltage: ± 150 V peak

Maximum Switching Current: 0.5 A

Carry Current: 1.5 A

Bandwidth: 25 MHz

Thermal Offset Voltage: < 50 μ V

Input Protection: 100 ohm current-limiting resistors

Key Features

Non-latching reed relay architecture ensures signal isolation and minimal cross-talk

Dual-bank configuration supports independent or parallel switching operations

Eight armature Analog Bus relays enable direct connection to system measurement buses

Integrated relay counter provides predictive maintenance capability

78-pin D-sub connectors standardize physical integration with mass interconnect solutions

Low thermal offset voltage (< 50 μ V) supports precision analog measurement

Typical Applications

Automated test systems requiring high-channel-count signal routing; data acquisition and continuous monitoring tasks; two-wire and four-wire resistance measurement setups; high-throughput production test environments where scan speed and channel density directly impact throughput.

Compatibility & Integration

Designed exclusively as a plug-in module for the Keysight 34980A mainframe. Supports SCPI command control and programming interfaces including Agilent VEE Pro, National Instruments TestStand, LabWindows/CVI, and LabVIEW. Optional terminal block adapters (34924T) and D-sub cabling accessories are available for field customization.

34924A Characteristics / Specifications

PARAMETER	VALUE
Model	34924A
Instrument Type	Reed multiplexer module
Host Mainframe	34980A
Channel Count 2 Wire	70
Channel Count 4 Wire	35
Bank Architecture	two banks of 35 channels
Max Volts	plus or minus 150 V peak
Switch Current	0.5 A
Carry Current	1.5 A
Power Rating	10 W
Volt Hertz Limit	1e8
Initial Closed Channel Resistance	less than 1.5 ohm
Offset Voltage	less than 50 uV
Dc Isolation	greater than 10 Gohm
Bandwidth At Terminal Block	25 MHz
Crosstalk At 300 kHz	minus 75 dB
Scan Rate To Internal Dmm	500 channels/s
Open Close Time Typical	0.5 ms / 0.5 ms
Relay Life No Load Typical	1000 M operations
Relay Life 10 V 100 mA Typical	10 M operations
Relay Life Rated Load Typical	10 k operations
Input Protection Resistors	100 ohm
Configurations Supported	2-wire or 4-wire
Analog Bus	supported
Mechanical Package	34980A plug-in module

PARAMETER

VALUE

Connector Family

78 pin Dsub or detachable terminal block

Bandwidth

At Terminal Block: 25 MHz

34924A Specifications

PARAMETER	VALUE
Applications	High-density mid-voltage scanning into the 34980A internal DMM, automated functional test, and 2-wire or 4-wire resistance measurements.
Key Features	Reed relays for 500 channel/s internal DMM scans
Two banks of 35 channels with analog bus relays	100 ohm in-rush resistors on reed paths
Technical Specifications	Model: 34924A

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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Connector Family	78 pin Dsub or detachable terminal block

Notes

From Keysight 34980A Multifunction Switch/Measure Unit data sheet multiplexer tables for 34924A. Bypassing the 100 ohm resistors reduces reed life per the OEM notes.

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.