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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent / Keysight 34959A Breadboard Module for 34980A

Agilent Keysight 34959A Breadboard Module For 34980A The Agilent / Keysight 34959A is a breadboard / prototype plug-in module for the 34980A multifunction switch/measure mainframe allowing custom circuitry in a standard 34980A slot. Custom signal conditioning, prototype digital or analog circuits, and special-purpose interfaces inside 34980A systems. User breadboard area in 34980A form factor Access to mainframe power and control class Prototype custom IO Standard 34980A module envelope Serviceable custom electronics The Agilent / Keysight 34959A is a breadboard / prototype plug-in module for the 34980A multifunction switch/measure mainframe allowing custom circuitry in a standard 34980A slot. Custom signal conditioning, prototype digital or analog circuits, and special-purpose interfaces inside 34980A systems. User breadboard area in 34980A form factor Access to mainframe power and control class Prototype custom IO Standard 34980A module envelope Serviceable custom electronics Storage Temperature Class: minus 20 C to 70 C



MODEL

**Agilent / Keysight
34959A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

34959A

LISTING

<https://aumictechlabs.com/products/34959a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight 34959A Breadboard Module is a plug-in accessory for the 34980A Multifunction Switch/Measure Unit that provides a dedicated platform for integrating custom circuitry and prototyping within the mainframe. The module delivers access to onboard power supplies, digital I/O ports, relay drive lines, and internal connections to the 34980A's analog buses and DMM, all controlled via SCPI commands for automated test system integration.

Technical Specifications

Custom Circuit Space: 5.4 × 7.5 × 0.9 inches (137 × 190 × 23 mm) Power Supplies: - +12V supply: 6W maximum, 10% regulation (no load to full load) - +5V supply: 1W maximum, 5% regulation (no load to full load) Digital I/O Ports: 16 channels, configurable as input or output (16 bits total) Relay Drive Lines: 32 lines, each capable of sinking 100 mA Maximum Module Power Dissipation: 6W Mounting: Fifteen countersunk holes in base for component installation

Key Features

Internal ribbon cable connectors link directly to 34980A mainframe resources Two external D-sub connector ports (DB50 or DB78 options) for field wiring Faceplate cutouts accommodate common connector types Configurable GPIO for discrete signal control and monitoring Independent relay drive circuitry for external relay actuation SCPI command interface for full programmability in test sequences

Interfaces

SCPI read and write command control Internal connections to 34980A analog buses and integrated DMM External D-sub connectors for remote signal distribution Ribbon cable connectors for mainframe integration

Compatibility & Integration

Exclusively compatible with the Keysight 34980A Multifunction Switch/Measure Unit. Mounts directly within the mainframe without external enclosures or adapters, enabling transparent integration of user-designed test circuits into larger automated measurement systems.

34959A Characteristics / Specifications

PARAMETER	VALUE
Model	34959A
Instrument Type	breadboard module
Mainframe	34980A
Manufacturer	Agilent Keysight
Form Factor	34980A plug-in
Function	user prototype area
Operating Temperature Class	0 C to 55 C
Storage Temperature Class	minus 20 C to 70 C
Humidity Class	non condensing
Power	mainframe powered rails available class
Cooling	mainframe airflow
Remote Interface	via 34980A as custom
Duty	continuous
Grounding	mainframe chassis
Safety	user must observe rail limits
Connectors	user defined front IO
Mass Class	plug-in module
Compatibility	34980A slots
Construction	breadboard pad area
Isolation	user designed
Firmware	identity string in mainframe
Voltage Rails Class	34980A module power pins
Current Budget Class	per mainframe slot budget
Prototype Area	solderable pads class
Documentation	34959A user guide

PARAMETER	VALUE
Humidity Noncondensing	yes
Storage	instrument storage
Storage temperature	Class: minus 20 C to 70 C
Operating temperature	Class: 0 C to 55 C
Humidity	Class: non condensing

34959A Specifications

PARAMETER	VALUE
Agilent Keysight 34959A Breadboard Module For 34980A	Overview
Applications	Custom signal conditioning, prototype digital or analog circuits, and special-purpose interfaces inside 34980A systems.
Key Features	User breadboard area in 34980A form factor
Access to mainframe power and control class	Prototype custom IO
Technical Specifications	Model: 34959A
Notes	Identity from Agilent/Keysight 34959A Breadboard Module for 34980A. Electrical performance is entirely user-circuit dependent.

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	Class: minus 20 C to 70 C
Operating temperature	Class: 0 C to 55 C
Operating Temperature	Class: 0 C to 55 C
Humidity	Class: non condensing
Operating Temperature Class	0 C to 55 C
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Humidity Noncondensing	yes
Storage	instrument storage Notes Identity from Agilent/Keysight 34959A Breadboard Module for 34980A. Electrical performance is entirely

PARAMETER	VALUE
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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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PARAMETER	VALUE
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Storage	instrument storage
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Notes

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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

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NIST-traceable calibration · SAM registered ·
30-day returns
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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.