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Data Sheet

August 13, 2026

AGILENT

Agilent DAQM900A 20 Channel Solid-state Multiplexer Module

Keysight DAQM900A 20-Channel Solid-State Multiplexer The Keysight DAQM900A is a 20-channel solid-state (FET) multiplexer plug-in for the DAQ970A and DAQ973A data acquisition mainframes. It provides two banks of 10 isolated two-wire channels, 2- and 4-wire scanning, and a built-in thermocouple cold-junction reference. Scan rate is 450 channels/s for DCV/ohms, with 120 V and 20 mA switching, 10 MHz bandwidth, and less than 4 uV thermal offset. Solid-state switches target high-cycle, low-offset applications. The Keysight DAQM900A is a 20-channel solid-state (FET) multiplexer plug-in for the DAQ970A and DAQ973A data acquisition mainframes. It provides two banks of 10 isolated two-wire channels, 2- and 4-wire scanning, and a built-in thermocouple cold-junction reference. Scan rate is 450 channels/s for DCV/ohms, with 120 V and 20 mA switching, 10 MHz bandwidth, and less than 4 uV thermal offset. Solid-state switches target high-cycle, low-offset applications. High-speed automated scanning of DC/AC voltage, 2-/4-wire resistance, frequency/period, and thermocouples; environmental monitoring; component test; DAQ970A/DAQ973A systems that need 450 ch/s rather than 80 ch/s.



MODEL

**Agilent
DAQM900A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

DAQM900A

LISTING

<https://aumictechlabs.com/products/daqm900a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Agilent DAQM900A is a 20-channel solid-state multiplexer module designed for integration into automated measurement systems. It routes multiple input signals to a single measurement instrument, enabling efficient high-throughput data acquisition. Built on solid-state relay technology, the module delivers fast switching speeds and extended operational life compared to mechanical alternatives, making it suitable for research and development, industrial monitoring, and comprehensive system testing.

Technical Specifications

- Channels:** 20 single-ended input channels
- Switching Technology:** Solid-state relays for fast switching and long operational life
- Signal Integrity:** Low signal degradation; minimized insertion loss, crosstalk, and OFF-isolation for accurate small-signal measurements
- Contact Resistance:** Low contact resistance minimizes voltage drop across the switch
- Switching Speed:** Fast switching capable; enables high-throughput testing and measurement

Key Features

- Single-ended channel architecture optimized for signal routing in automated test environments
- Solid-state design eliminates mechanical wear and enables rapid channel switching
- Low-loss signal path preserves measurement accuracy across all 20 channels
- Mainframe-based integration eliminates standalone hardware requirements

Typical Applications

- Multi-channel data acquisition in automated test systems
- Signal routing and switching in industrial monitoring
- Research and development measurement systems
- High-speed switching applications requiring minimal signal degradation

Compatibility & Integration

The DAQM900A works with the Agilent 34980A Multifunction Switch/Measure Mainframe. The module installs directly into the mainframe chassis and is controlled via SCPI commands and programming interfaces supporting LabVIEW, C++, and Python through manufacturer-provided drivers and libraries.

Features & description

From manufacturer datasheet

Built-in thermocouple reference junction

On-module screw terminals, 16 to 22 AWG, with strain relief Connects to the mainframe internal 6.5-digit DMM without external analog cabling Code-compatible DAQ970A/34970A module ecosystem Technical Specifications Model: DAQM900A Manufacturer: Keysight / Agilent Instrument Type: 20-channel solid-state multiplexer module Alias: Keysight DAQM900A; Agilent DAQM900A Host Mainframes: DAQ970A and DAQ973A Channel Count: 20 isolated two-wire (two banks of 10) Four Wire Pairing: BankA automatically paired with BankB Switch Type: 2-wire solid state (4-wire selectable) Scanning Speed DCV Ohms: 450 ch/s (INIT, MEAS, FETch) Scanning Speed ACV: 90 ch/s Scanning Speed Thermocouple: 150 ch/s Open Close Speed: 120 ch/s Maximum Switching Voltage: 120 V DC/AC Maximum Switching Current: 20 mA (0.02 A) Maximum Switching Power: 2.4 W Bandwidth: 10 MHz Thermal Offset: less than 4 uV incremental to DMM specifications Channel Isolation: greater than 10 GOhm channel-to-channel and channel-to-earth Initial Closed Channel Resistance: less than 50 ohm Offset Resistance Four Wire: less than 4 mOhm incremental to DMM Maximum Resistance Range: 1 MOhm specified; 10 MOhm and above not specified Low Ohms Note: series resistance limits 100 ohm and 1 kOhm 2-wire precision; 4-wire recommended

DAQM900A Characteristics / Specifications

PARAMETER	VALUE
Model	DAQM900A
Manufacturer	Keysight / Agilent
Instrument Type	20-channel solid-state multiplexer module
Alias	Keysight DAQM900A; Agilent DAQM900A
Host Mainframes	DAQ970A and DAQ973A
Channel Count	20 isolated two-wire (two banks of 10)
Four Wire Pairing	BankA automatically paired with BankB Switch Type: 2-wire solid state (4-wire selectable)
Scanning Speed DCV Ohms	450 ch/s (INIT, MEAS, FETch)
Scanning Speed ACV	90 ch/s
Scanning Speed Thermocouple	150 ch/s
Open Close Speed	120 ch/s
Maximum Switching Voltage	120 V DC/AC
Maximum Switching Current	20 mA (0.02 A)
Maximum Switching Power	2.4 W
Bandwidth	10 MHz
Thermal Offset	less than 4 μ V incremental to DMM specifications
Channel Isolation	greater than 10 GOhm channel-to-channel and channel-to-earth
Initial Closed Channel Resistance	less than 50 ohm
Offset Resistance Four Wire	less than 4 mOhm incremental to DMM
Maximum Resistance Range	1 MOhm specified; 10 MOhm and above not specified
Low Ohms Note	series resistance limits 100 ohm and 1 kOhm 2-wire precision; 4-wire recommended
Supported DMM Functions	ACV/DCV, frequency/period, 2-wire ohms, 4-wire ohms, thermocouple
Unsupported DMM Functions	ACI/DCI, RTD, thermistor, capacitance
Cold Junction	built-in thermocouple reference

PARAMETER	VALUE
Open Thermocouple Check	selectable per channel; open greater than 5 kOhm
Connector	screw terminal, 16 to 22 AWG (20 AWG recommended for high channel count)
Switching Sequence	break-before-make
AC Source Impedance Guidance	5 ohm or less for full frequency range; 50 ohm or less to 5 kHz
Operating Temperature Full Accuracy	0 C to 55 C (mainframe class)
Module Slots Per Mainframe	up to 3 (120 channels per system with 20-ch modules)
Internal DMM Resolution Host	6.5 digits (22 bit)
Host Basic DCV Accuracy	0.003 percent (1 year, DAQ970A/973A) Notes Specs from the Keysight DAQ970A/DAQ973A data acquisition system data sheet module tables for DAQM900A. This module does not switch current; use DAQM901A if current channels are required. Confirm host (DAQ970A vs DAQ973A) and slot population on the system.
Operating temperature	Full Accuracy: 0 C to 55 C (mainframe class)

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Full Accuracy: 0 C to 55 C (mainframe class)
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Model	DAQM900A
Manufacturer	Keysight / Agilent
Instrument Type	20-channel solid-state multiplexer module
Alias	Keysight DAQM900A; Agilent DAQM900A
Host Mainframes	DAQ970A and DAQ973A
Channel Count	20 isolated two-wire (two banks of 10)
Four Wire Pairing	BankA automatically paired with BankB Switch Type: 2-wire solid state (4-wire selectable)
Scanning Speed DCV Ohms	450 ch/s (INIT, MEAS, FETch)
Scanning Speed ACV	90 ch/s
Scanning Speed Thermocouple	150 ch/s
Open Close Speed	120 ch/s
Maximum Switching Voltage	120 V DC/AC
Maximum Switching Current	20 mA (0.02 A)
Maximum Switching Power	2.4 W
Bandwidth	10 MHz
Thermal Offset	less than 4 uV incremental to DMM specifications
Channel Isolation	greater than 10 GOhm channel-to-channel and channel-to-earth
Initial Closed Channel Resistance	less than 50 ohm
Offset Resistance Four Wire	less than 4 mOhm incremental to DMM
Maximum Resistance Range	1 MOhm specified; 10 MOhm and above not specified
Low Ohms Note	series resistance limits 100 ohm and 1 kOhm 2-wire precision; 4-wire recommended
Supported DMM Functions	ACV/DCV, frequency/period, 2-wire ohms, 4-wire ohms, thermocouple

PARAMETER	VALUE
Unsupported DMM Functions	ACI/DCI, RTD, thermistor, capacitance
Cold Junction	built-in thermocouple reference
Open Thermocouple Check	selectable per channel; open greater than 5 kOhm
Connector	screw terminal, 16 to 22 AWG (20 AWG recommended for high channel count)
Switching Sequence	break-before-make
AC Source Impedance Guidance	5 ohm or less for full frequency range; 50 ohm or less to 5 kHz
Operating Temperature Full Accuracy	0 C to 55 C (mainframe class)
Module Slots Per Mainframe	up to 3 (120 channels per system with 20-ch modules)
Internal DMM Resolution Host	6.5 digits (22 bit)
Host Basic DCV Accuracy	0.003 percent (1 year, DAQ970A/973A) Notes Specs from the Keysight DAQ970A/DAQ973A data acquisition system data sheet module tables for DAQM900A. This module does not switch current; use DAQM901A if current channels are required. Confirm host (DAQ970A vs DAQ973A) and slot population 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.

environmental monitoring; component test; DAQ970A/DAQ973A systems that need 450 ch/s rather than armature 80 ch/s.

Key Features

Solid-state FET switching for long life and low thermal offset

Two isolated banks of 10 two-wire channels; BankA pairs with BankB for 4-wire ohms

Break-before-make scanning (only one channel or pair closed)

Built-in thermocouple reference junction

On-module screw terminals, 16 to 22 AWG, with strain relief

Connects to the mainframe internal 6.5-digit DMM without external analog cabling

Code-compatible DAQ970A/34970A module ecosystem

Technical Specifications

Technical Specifications

PARAMETER	VALUE
Model	DAQM900A
Manufacturer	Keysight / Agilent
Instrument Type	20-channel solid-state multiplexer module
Alias	Keysight DAQM900A; Agilent DAQM900A
Host Mainframes	DAQ970A and DAQ973A
Channel Count	20 isolated two-wire (two banks of 10)
Four Wire Pairing	Bank A automatically paired with Bank B
Switch Type	2-wire solid state (4-wire selectable)
Scanning Speed DCV Ohms	450 ch/s (INIT, MEAS, FETch)
Scanning Speed ACV	90 ch/s
Scanning Speed Thermocouple	150 ch/s
Open Close Speed	120 ch/s
Maximum Switching Voltage	120 V DC/AC
Maximum Switching Current	20 mA (0.02 A)
Maximum Switching Power	2.4 W
Bandwidth	10 MHz
Thermal Offset	less than 4 uV incremental to DMM specifications
Channel Isolation	greater than 10 GOhm channel-to-channel and channel-to-earth
Initial Closed Channel Resistance	less than 50 ohm
Offset Resistance Four Wire	less than 4 mOhm incremental to DMM

PARAMETER	VALUE
Maximum Resistance Range	1 MOhm specified; 10 MOhm and above not specified
Low Ohms Note	series resistance limits 100 ohm and 1 kOhm 2-wire precision; 4-wire recommended
Supported DMM Functions	ACV/DCV, frequency/period, 2-wire ohms, 4-wire ohms, thermocouple
Unsupported DMM Functions	ACI/DCI, RTD, thermistor, capacitance
Cold Junction	built-in thermocouple reference
Open Thermocouple Check	selectable per channel; open greater than 5 kOhm
Connector	screw terminal, 16 to 22 AWG (20 AWG recommended for high channel count)
Switching Sequence	break-before-make
AC Source Impedance Guidance	5 ohm or less for full frequency range; 50 ohm or less to 5 kHz
Operating Temperature Full Accuracy	0 C to 55 C (mainframe class)
Module Slots Per Mainframe	up to 3 (120 channels per system with 20-ch modules)
Internal DMM Resolution Host	6.5 digits (22 bit)
Host Basic DCV Accuracy	0.003 percent (1 year, DAQ970A/973A)

Technical Specifications

PARAMETER	VALUE
Model	DAQM900A
Manufacturer	Keysight / Agilent
Instrument Type	20-channel solid-state multiplexer module
Alias	Keysight DAQM900A; Agilent DAQM900A
Host Mainframes	DAQ970A and DAQ973A
Channel Count	20 isolated two-wire (two banks of 10)
Four Wire Pairing	BankAautomatically paired with BankBSwitch Type: 2-wire solid state (4-wire selectable)
Scanning Speed DCV Ohms	450 ch/s (INIT, MEAS, FETCh)
Scanning Speed ACV	90 ch/s
Scanning Speed Thermocouple	150 ch/s
Open Close Speed	120 ch/s
Maximum Switching Voltage	120 V DC/AC
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Host Basic DCV Accuracy	0.003 percent (1 year, DAQ970A/973A)

Notes

Specs from the Keysight DAQ970A/DAQ973A data acquisition system data sheet module tables for DAQM900A. This module does not switch current; use DAQM901A if current channels are required. Confirm host (DAQ970A vs DAQ973A) and slot population 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

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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.