

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 34907A

Agilent Keysight 34907A Multifunction Module The Agilent/Keysight 34907A is an earth-referenced multifunction module for the 34970A/34972A combining two 8-bit DIO ports, a 26-bit 100 kHz totalizer, and two plus or minus 12 V analog outputs. Sense and control in DAQ systems: digital bus and limit-switch status, event counting, bias setpoints, and analog programmable supply control. Digital and totalizer channels can be included inascan The Agilent/Keysight 34907A is an earth-referenced multifunction module for the 34970A/34972A combining two 8-bit DIO ports, a 26-bit 100 kHz totalizer, and two plus or minus 12 V analog outputs. Sense and control in DAQ systems: digital bus and limit-switch status, event counting, bias setpoints, and analog programmable supply control. Digital and totalizer channels can be included inascan Continuous alarm evaluation between scans



MODEL

**Agilent / Keysight
34907A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

34907A

LISTING

<https://aumictechlabs.com/products/34907a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keysight 34907A is a multifunction module that expands the 34970A and 34972A Data Acquisition/Switch Units with integrated digital I/O, analog output, and event counting capabilities. This earth-referenced module delivers precise signal control and monitoring for automated test systems, enabling engineers and system integrators to implement sense and control functions across a single platform. Technical Specifications Digital Input/Output Two 8-bit ports for digital

input and output 400 mA sink capability with 42 V open collector outputs Digital inputs monitor limit switches and digital bus status Digital outputs control microwave switches, attenuators, solenoids, power relays, and indicators via external power supply Alarm limits continuously evaluated between scans Front panel or bus-initiated reads and writes Totalizer Input Single channel, 100 kHz gated totalizer 26-bit resolution for event counting 1 Vpp sensitivity Continuous alarm evaluation across scan intervals Counts events from photo interrupters, limit switches, and Hall-effect sensors Runtime capacity of approximately 45 minutes at full speed before overflow Real-time total access via front panel or programmatic interface Analog Output Two channels, ± 12 V output range 16-bit resolution Non-isolated Direct voltage programming from front panel or bus

Key Features Scanned or standalone operation for digital inputs and totalizer Continuous alarm monitoring for digital and event counter inputs Screw-terminal on-module connections BenchVue software control and analysis support

Typical Applications External device status sensing and control Bias voltage sourcing to devices under test Analog programmable power supply control Control system setpoint management High-speed event counting with minimal overflow risk

Compatibility & Integration Designed exclusively for the Keysight 34970A and 34972A Data Acquisition/Switch Units.

34907A Characteristics / Specifications

PARAMETER	VALUE
Model	34907A
Instrument Type	Multifunction DIO totalizer DAC module
Digital Ports	Port 1 and Port 2, 8 bit input or output nonisolated
Digital Vin Low	less than 0.8 V TTL
Digital Vin High	greater than 2.0 V TTL
Digital Vout Low	less than 0.8 V at Iout = minus 400 mA
Digital Vout High	greater than 2.4 V at Iout = 1 mA
Digital Vin High Max	less than 42 V with external open drain pull-up
Digital Alarming	maskable pattern match or state change
Digital Alarm Sampling	4 ms max
Digital Alarm Latency Typical	5 ms to 34970A alarm output
Digital Read Write Speed	95 per second
Totalizer Max Count	2 ²⁶ minus 1
Totalize Input Rate	100 kHz max rising or falling edge programmable
Totalize Signal Level	1 V peak to peak min; 42 Vpk max
Totalize Threshold	0 V or TTL jumper selectable
Totalize Gate	TTL Hi, TTL Lo, or none
Totalize Read Speed	85 per second
Analog Output Range	plus or minus 12 V nonisolated two DACs
Analog Output Resolution	1 mV
Analog Output Current	10 mA max per DAC; 40 mA total output per frame
Analog Output Settling Time	1 ms to 0.01 percent of output
Analog Output Accuracy 1 Year	0.25 percent plus 20 mV at plus or minus 5 C
Analog Output Tempco	plus or minus (0.015 percent plus 1 mV) perC Scanning Digital In Rate Class: 250 to 275 ch/s class
Mainframe Compatibility	34970A and 34972A

PARAMETER	VALUE
Operating Temperature	0 C to 55 C
Series Family	Keysight 34970A plug-in modules

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	0 C to 55 C
Operating Temperature	0 C to 55 C
Series Family	Keysight 34970A plug-in modules Notes From Agilent/Keysight 34970A Data Acquisition/Switch Unit datasheet multifunction module specifications for 34907A.

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	34907A
Instrument Type	Multifunction DIO totalizer DAC module
Digital Ports	Port 1 and Port 2, 8 bit input or output nonisolated
Digital Vin Low	less than 0.8 V TTL
Digital Vin High	greater than 2.0 V TTL
Digital Vout Low	less than 0.8 V at Iout = minus 400 mA
Digital Vout High	greater than 2.4 V at Iout = 1 mA
Digital Vin High Max	less than 42 V with external open drain pull-up
Digital Alarming	maskable pattern match or state change
Digital Alarm Sampling	4 ms max
Digital Alarm Latency Typical	5 ms to 34970A alarm output
Digital Read Write Speed	95 per second
Totalizer Max Count	2^26 minus 1
Totalize Input Rate	100 kHz max rising or falling edge programmable
Totalize Signal Level	1 V peak to peak min; 42 Vpk max
Totalize Threshold	0 V or TTL jumper selectable
Totalize Gate	TTL Hi, TTL Lo, or none
Totalize Read Speed	85 per second
Analog Output Range	plus or minus 12 V nonisolated two DACs
Analog Output Resolution	1 mV
Analog Output Current	10 mA max per DAC; 40 mA total output per frame
Analog Output Settling Time	1 ms to 0.01 percent of output
Analog Output Accuracy 1 Year	0.25 percent plus 20 mV at plus or minus 5 C
Analog Output Tempco	plus or minus (0.015 percent plus 1 mV) perCScanning Digital In Rate Class: 250 to 275 ch/s class
Mainframe Compatibility	34970A and 34972A

PARAMETER	VALUE
Operating Temperature	0 C to 55 C
Series Family	Keysight 34970A plug-in modules

Notes
From Agilent/Keysight 34970A Data Acquisition/Switch Unit datasheet multifunction module specifications for 34907A.

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

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 14, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.