

KEYSIGHT TECHNOLOGIES (AGILENT HP)

34907A

The Keysight (formerly Agilent) 34907A is a multifunction module designed for the 34970A and 34972A Data Acquisition/Switch Units. It provides high flexibility for sensing and control applications by integrating 16 bits of digital input/output, a 100 kHz gated totalizer, and two ± 12 V analog outputs (DACs) on a single earth-referenced plug-in module.

SPECIFICATIONS

General

Interfaces	Mainframe-dependent (GPIB, RS-232, USB, LAN via host mainframe)
------------	---

Physical

Power Supply	Powered via mainframe backplane
Operating Temperature	0°C to 55°C °C
Number of Slots Occupied	1

Module Overview

Module Type	Multifunction Module
Module Composition	16 digital I/O bits, 2 analog outputs, 1 totalizer channel
Supported Mainframe Models	34970A, 34972A
Maximum Common Mode Voltage	42 V peak (with respect to earth)

Digital Input / Output

Number of Digital I/O Ports	2
Bits per Port	8
Total Digital I/O Bits	16
Input High Voltage (VIH)	≥ 2.0 V
Input Low Voltage (VIL)	≤ 0.8 V
Maximum Input Voltage	42 V peak
Digital Output Type	Open-drain (sink)
Maximum Sink Current per Bit	400 mA
Maximum External Voltage for Output	42 VDC

Analog Output (DAC)

Number of DAC Channels	2
Output Voltage Range	± 12 V
Maximum Output Current	± 10 mA
DC Voltage Accuracy	$\pm(0.25\% \text{ of output} + 20 \text{ mV})$ (1 Year, 23°C $\pm$ 5°C)
Temperature Coefficient	$\pm(0.015\% \text{ of output} + 1 \text{ mV})/^{\circ}\text{C}$

Totalizer / Counter

Number of Totalizer Channels	1
Counter Resolution	26-bit (up to 67,108,863 counts)
Maximum Count Rate	100 kHz
Minimum Pulse Width	5 μ s
Totalizer Input High Voltage (VIH)	≥ 2.0 V
Totalizer Input Low Voltage (VIL)	≤ 0.8 V
Totalizer Maximum Input Voltage	42 V peak
Trigger Edge Sensitivity	Selectable rising or falling edge
Totalizer Maximum Count	67,108,863 (26-bit)

Digital Input/Output

Digital Output Low Voltage (VOL)	≤ 0.4 V @ 40 mA sink
----------------------------------	---------------------------

TECHNOLOGY

Data Acquisition / DAQ Module

APPLICATIONS

Test and measurement, sensing, control applications

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.