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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 70001A - 8-Slot System Mainframe for MMS modules

The HP 70001A is an 8-slot system mainframe for the HP 70000 Modular Measurement System. OEM MMS overview and AssetRelay summaries list eight module slots, MSIB and HP-IB digital communication, forced-air cooling, EIA rack compatibility, optional 400 Hz line operation, 110/220 V 50/60 Hz power, and 0 to 55 C operating temperature. Hosting MMS plug-in spectrum analyzer, lightwave, and stimulus modules for rack or benchtop modular RF/microwave/optical systems. Form Factor: EIA rack compatible mainframe Computer Control: GPIB to external controllers and VXI products Power Distribution: mainframe supplies module power Display Pairing: used with HP 70004A display in many systems From HP 70000 Modular Measurement System overview materials and AssetRelay/Keysight 70001A mainframe summaries. Exact empty-chassis mass and drawing dimensions vary by configuration documentation; confirm on the installation manual for the serial prefix.



MODEL

**Agilent / Keysight
70001A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

70001A

LISTING

<https://aumictechlabs.com/products/70001a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight 70001A is an 8-slot system mainframe that houses and powers Modular Measurement System (MMS) plug-in modules, delivering a unified platform for test and measurement applications across industrial and laboratory environments. It has regulated power,

forced-air cooling, and dual communication buses MSIB for high-speed inter-module data exchange and GPIB for external instrument control - enabling synchronized operation of multiple measurement modules within a single chassis.

Technical Specifications

Module Capacity: 8 slots; accommodates 1/8-, 1/4-, 3/8-, and 1/2-width MMS modules

Power Supply Output: 24.3 Vac (average voltage) at 40 kHz, up to 200 W; 5 VDC for MSIB; TTL-compatible line synchronization signal

Cooling: Forced-air cooling system for plug-in modules

Communication Interfaces: MSIB: High-speed digital bus enabling simultaneous multi-module communication

GPIB/HP-IB: Computer control and integration with GPIB and VXIbus instruments

Key Features

- Supports mixed-width module configurations, maximizing slot utilization efficiency
- Integrated bails and handles for benchtop portability; compatible with standard EIA racks
- Rugged structural design and good EMC performance for sensitive measurements in industrial environments
- 40 kHz AC power architecture optimized for MMS module operation

Typical Applications

The 70001A is the foundational chassis for microwave test systems, RF measurement suites, and modular instrumentation configurations requiring synchronized multi-module operation and external system integration via GPIB control.

Compatibility & Integration

Designed exclusively for Agilent/Keysight MMS plug-in modules. Integrates with GPIB-compatible instruments and VXIbus products. Required mainframe for modules such as the Keysight 70428A Microwave Source Module.

70001A Characteristics / Specifications

PARAMETER	VALUE
Module Slots	8
Interface Buses	MSIB and HP-IB (GPIB)
Form Factor	EIA rack compatible mainframe
Power Line Standard	110/220 V 50/60 Hz
Power Line Option 4	400 Hz power line operation
Operating Temperature	0 to 55 C
Cooling	forced-air cooling system
Emc Performance	industrial rugged design class
Structural Design	rugged MMS chassis
Bail Handles	integral bails and handles for benchtop
Typical Shipping Mass Class	about 14 lb empty class listing
Typical Dimensions Class	about 22 × 15 × 12 in shipping class listing
Modules Supported Examples	70311A 70841B 70950A/B 70951B 70952B
Digital Communication	simultaneous MSIB module messaging
Computer Control	GPIB to external controllers and VXI products
Power Distribution	mainframe supplies module power
Installation	front-load MMS modules
Self Test	power-on self-test supported
Display Pairing	used with HP 70004A display in many systems

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	0 to 55 C
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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

Specifications

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Module Slots	8
Interface Buses	MSIB and HP-IB (GPIB)
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Power Line Option 400	400 Hz power line operation
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Option 010: rackmount slide kit 5062-0781

Option 908: rackmount kit without handles 5061-9678

Option 913: rackmount kit with handles 5061-9772

Option 910: extra installation verification manual

Specifications

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summaries. Exact empty-chassis mass and drawing dimensions vary by configuration documentation; confirm on the installation manual for the serial prefix.

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.