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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 70311A – Frequency Reference Distribution Module

The HP 70311A distributes a precision 10 MHz frequency reference across 70000 MMS mainframes. OEM 70000 accessory data list 10 MHz reference distribution so multiple MMS modules share a common timebase (internal or external 10 MHz), reducing residual FM and improving frequency accuracy in 71200/71209-class analyzers. Locking MMS spectrum-analyzer modules to a house 10 MHz standard. Instrument Type: Frequency reference distribution module Platform: HP 70000 modular measurement system HP Agilent 70311A Frequency Reference Distribution Module The HP 70311A distributes a precision 10 MHz frequency reference across 70000 MMS mainframes. OEM 70000 accessory data list 10 MHz reference distribution so multiple MMS modules share a common timebase (internal or external 10 MHz), reducing residual FM and improving frequency accuracy in 71200/71209-class analyzers. Locking MMS spectrum-analyzer modules to a house 10 MHz standard. Instrument Type: Frequency reference distribution module



MODEL Agilent / Keysight 70311A	CALIBRATION Available on request
CONDITION Used	STATUS In stock
RFQ / SKU 70311A	LISTING https://aumictechlabs.com/products/70311a-2/

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Agilent/Keysight 70311A is a synthesized frequency reference distribution module designed to generate precise clock signals within the Hewlett-Packard Modular Measurement System (MMS)

platform. Operating across 16 MHz to 3.3 GHz with 1 Hz step resolution, this four-slot module delivers variable synthesized clock outputs at ± 3 dBm into 50 ohm loads. Built for electronic testing and measurement applications, It has the frequency stability and spectral purity demanded by error performance analysis and pattern generation systems.

Technical Specifications

Frequency Range: 16 MHz to 3.3 GHz Frequency Resolution: 1 Hz Output Level: ± 3 dBm Output Impedance: 50 ohm Output Connector: N-type female, AC coupled Frequency Stability: ± 2 ppm/year (after 1 year aging); ± 6 ppm over 0 to 40°C Harmonic Content: < -30 dBc Phase Noise: -75 dBc/Hz at 1 kHz offset; -115 dBc/Hz at 20 kHz offset (at 3.3 GHz carrier) Module Occupancy: 4 MMS slots User Setups: 10 non-volatile memory locations

Key Features

Plug-in module compatible with HP 70000 Series MMS mainframes No integrated display; controlled via HP-MSIB interface and associated MMS display softkeys Stores and recalls user-defined instrument configurations Recommended display: HP 70004A

Typical Applications

Clock source for HP 71600B Series error performance analyzers and pattern generators. Suitable for any MMS system requiring variable-frequency reference distribution with high spectral purity and frequency resolution.

Compatibility & Integration

Designed for the Hewlett-Packard Modular Measurement System architecture. Compatible with MMS mainframes equipped with suitable displays. Functions as primary frequency reference for downstream measurement and pattern generation modules.

70311A Characteristics / Specifications

PARAMETER	VALUE
Model	70311A
Instrument Type	Frequency reference distribution module
Platform	HP 70000 modular measurement system
Host Mainframe	70001A MMS mainframe
Reference Frequency	10 MHz
Function	distribute 10 MHz to MMS modules
Lo Module	70900B local oscillator family
Manufacturer	HP Agilent Keysight
Mechanical Package	MMS plug-in module
System Family	HP 70000 MMS
External Reference	house 10 MHz standard when connected
Internal Reference	MMS internal 10 MHz when selected
Documentation	HP 70000/70311A frequency reference distribution data
Application Class	timebase distribution
Related 70912B	RF section in the same MMS crate
Related 70590A	IF section in the same MMS crate
Control	MMS master
Duty	continuous reference distribution
Mainframe Power	from 70001A
Accuracy Benefit	reduces residual FM versus unlocked modules
Connector	10 MHz in/out as on 70311A
Module Role	10 MHz distribution in 70000 MMS

70311A Specifications

PARAMETER	VALUE
Applications	Locking MMS spectrum-analyzer modules to a house 10 MHz standard.
Key Features	10 MHz reference distribution
Improves MMS frequency accuracy	Used with 70900 LO systems
Technical Specifications	Model: 70311A

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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Connector	10 MHz in/out as on 70311A
Module Role	10 MHz distribution in 70000 MMS
Notes	
From HP 70000 MMS accessory data for 70311A 10 MHz frequency-reference distribution. Confirm whether the crate uses internal or external 10 MHz.	

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.