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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 70900B " Local Oscillator Module

HP Agilent 70900B Local Oscillator Module The HP 70900B is the local oscillator module for the HP 70000 modular measurement system spectrum analyzer family. OEM specifications define synthesized LO generation that phase-locks the modular RF and IF sections for calibrated frequency coverage. Core LO for 70000-series modular spectrum analyzers, millimeter-wave external mixing setups, and automated modular RF/microwave measurement systems. Synthesized local oscillator for 70000 MMS The HP 70900B is the local oscillator module for the HP 70000 modular measurement system spectrum analyzer family. OEM specifications define synthesized LO generation that phase-locks the modular RF and IF sections for calibrated frequency coverage. Core LO for 70000-series modular spectrum analyzers, millimeter-wave external mixing setups, and automated modular RF/microwave measurement systems. Synthesized local oscillator for 70000 MMS Supports external millimeter harmonic mixers



MODEL

**Agilent / Keysight
70900B**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

70900B

LISTING

<https://aumictechlabs.com/products/70900b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 70900B is a discontinued synthesized local oscillator module and master control unit for the 70000 Series Modular Measurement System. It functions as both the LO source and system controller for spectrum analyzers, surveillance receivers, and lightwave signal analyzers. The module delivers phase noise performance of -108 dBc/Hz at 10 kHz offset, millihertz frequency resolution, and fast tuning speed that directly influences analyzer responsiveness. As the master control module, it manages system features, slave module control, command processing speed, and GPIB operation. The 70900B occupies a 2-slot width and supports MSIB, HP-IB, and manual control with downloadable program capability, limit lines, and extensive marker functions. Its open-architecture design integrates into the 70000 MMS platform, allowing mainframes and displays to be separated by up to 1.2 kilometers and operation without a display to reduce cost and space requirements.

Technical Specifications
Phase noise: -108 dBc/Hz at 10 kHz offset
Frequency resolution: millihertz
Module width: 2-slot
Physical form: Plug-in module for 70000 Series mainframe

Key Features
Synthesized local oscillator with direct impact on system phase noise and frequency stability
Master control module governing slave module operation and command processing
MSIB, HP-IB, and manual control interfaces
Downloadable program capability
Limit line definition for component testing and digital radio masks
Extensive marker capability
Remote operation support with mainframe-to-display separation up to 1.2 kilometers
Display-independent operation capability

Typical Applications
Spectrum analysis systems
Surveillance receiver configurations
Lightwave signal analysis
Automatic test systems

Compatibility & Integration
The 70900B is designed exclusively for the Agilent/Keysight 70000 Series Modular Measurement System. It functions as the system master module within the open-architecture platform, enabling integration of multiple analysis modules and custom configurations. This product is obsolete; documentation is provided for legacy system support only.

70900B Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	Local oscillator module for 70000 MMS
System Family	HP 70000 modular measurement system
Frequency Reference	Internal or external 10 MHz class
LO Architecture	Synthesized phase locked
Module Bus	HP-MSIB
Compatible Displays	70004A and family displays
Compatible RF Modules	709xx series
External Mixer Support	With 11970 series harmonic mixers
Remote Control	Via MMS mainframe controller
Form Factor	MMS plug-in module
Operating Temperature Class	0 C to 55 C
Power	Supplied by MMS mainframe
Frequency Accuracy	Tied to reference accuracy
Switching Speed Class	synthesized LO switching class sheet
Phase Noise Class	determined by 70900B LO synthesizer OEM sheet
Spurious Class	specified on OEM LO data sheet
Minimum System Frequency	Set by installed RF module
Maximum System Frequency	Set by installed RF module and mixers
IF Alignment	With companion IF modules
Calibration	System-level amplitude calibration supported
Reference Output	10 MHz class
Reference Input	10 MHz class
Operating temperature	Class: 0 C to 55 C

70900B Specifications

PARAMETER	VALUE
HP Agilent 70900B Local Oscillator Module	Overview
Key Features	Synthesized local oscillator for 70000 MMS
Technical Specifications	Instrument Type: Local oscillator module for 70000 MMS

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Class: 0 C to 55 C
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Phase Noise Class	determined by 70900B LO synthesizer OEM sheet
Spurious Class	specified on OEM LO data sheet
Minimum System Frequency	Set by installed RF module
Maximum System Frequency	Set by installed RF module and mixers
IF Alignment	With companion IF modules
Calibration	System-level amplitude calibration supported
Reference Output	10 MHz class
Reference Input	10 MHz class Notes From HP 70900B local oscillator and 70000 MMS system documentation. System frequency span and amplitude accuracy depend on the installed RF/IF modules and any external mixers.

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 define synthesized LO generation that phase-locks the modular RF and IF sections for calibrated frequency coverage.

Applications

Core LO for 70000-series modular spectrum analyzers, millimeter-wave external mixing setups, and automated modular RF/microwave measurement systems.

Key Features

Synthesized local oscillator for 70000 MMS

Phase-locked modular spectrum analysis

Works with 709xx RF and IF modules

HP-MSIB modular interconnect

Supports external millimeter harmonic mixers

Technical Specifications

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Notes
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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.