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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent / Keysight M9383A PXIe Microwave Signal Generator, 1 MHz to 44 GHz

External Reference Amplitude: 0 to 10 dBm nominal Remote Interfaces: GPIB IEEE-488.2 and 1000BaseT LAN Required Frequency Reference Module: M9300A unless option 000 Numeric rows from Keysight M9383A PXIe Microwave Signal Generator data sheet (5992-1928 / KT-M9383A). Maximum power varies by frequency band and 1EA/1EB options. Remote Interfaces: GPIB IEEE-488.2 and 1000BaseT LAN Required Frequency Reference Module: M9300A unless option 000 Numeric rows from Keysight M9383A PXIe Microwave Signal Generator data sheet (5992-1928 / KT-M9383A). Maximum power varies by frequency band and 1EA/1EB options.



MODEL

**Agilent / Keysight
M9383A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

M9383A

LISTING

<https://aumictechlabs.com/products/m9383a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keysight M9383A is a PXIe modular microwave signal generator delivering 1 MHz to 44 GHz frequency coverage with configurable frequency options up to 44 GHz. This instrument provides 19 dBm output power at 1 GHz, with high-power and booster amplifier options available for 20 to 40 GHz operation. The M9383A supports RF modulation bandwidths up to 1 GHz internally and exceeding 2 GHz with external I/Q inputs, enabling complex vector modulation, pulse generation, and AM/FM/phase modulation across multiple configurations. Frequency switching executes in

250 μ s with phase noise of -118 dBc/Hz at 10 kHz offset (1 GHz). The instrument integrates within PXIe chassis alongside complementary test instruments, utilizing VCO or VCO+DDS synthesizer architectures with optional waveform memory up to 1024 MSa and integrated 10/100 MHz frequency reference capability.

Technical Specifications

Frequency Performance

Frequency range: 1 MHz to 44 GHz Configurable options: 14 GHz, 20 GHz, 31.8 GHz, 44 GHz Frequency switching speed: 250 μ s Phase noise at 1 GHz (10 kHz offset): -118 dBc/Hz Phase noise at 1 GHz (20 kHz offset): -118 dBc/Hz Harmonics at 1 GHz: -46 dBc Non-harmonics at 1 GHz: -45 dBc

Output Power

Output power at 1 GHz: 19 dBm High-power option: M9383A-1EA Booster amplifier option: M9383A-1EB (20 to 40 GHz)

Modulation Capability

Internal RF modulation bandwidth: Up to 1 GHz External RF modulation bandwidth: Over 2 GHz Internal AWG bandwidth options: 40 MHz, 160 MHz, 500 MHz, 1 GHz Vector modulation: Available (M9383A-B04 for 40 MHz) Pulse modulation: 30 ns (M9383A-PM1) and <25 ns (M9383A-PM2) AM/FM/phase modulation: M9383A-UNT Pulse train generator: M9383A-320

Memory & Synthesis

Waveform memory options: 32 MSa, 512 MSa, 1024 MSa Synthesizer architectures: VCO (ST2) or VCO+DDS (ST4)

Key Features

Single RF output with differential external I/Q input capability (M9383A-016) Integrated frequency reference option: 10 MHz and 100 MHz (M9383A-300) Compatible with external M9300A PXIe frequency reference

Compatibility & Integration

Operates as a PXIe module within Keysight chassis (M9010A 10-slot or M9019A 18-slot) with embedded controllers (M9035A, M9037A, M9038A) or external PC control via PCIe host adapter.

M9383A Characteristics / Specifications

PARAMETER	VALUE
Model	M9383A
Instrument Type	PXIe microwave signal generator
Frequency Range Option F	1 MHz to 31.8 GHz
Frequency Range Option F44 Without 1Eb	1 MHz to 44 GHz
Frequency Range Option F44 With 1Eb	1 MHz to 40 GHz
Frequency Resolution	0.01 Hz
Internal Rf Modulation Bandwidth	up to 1 GHz
External Iq Rf Modulation Bandwidth	over 2 GHz
Step Attenuator Range Option 1E	0 dB to 70 dB in 10 dB steps
Maximum Output Power Standard At 2 To 3.6 Ghz F14 F	10 dBm
Maximum Output Power Option 1Ea At 2 To 3.6 Ghz F14 F	22 dBm
Maximum Output Power Standard Above 40 Ghz F	8 dBm
Minimum Settable Power With 1E1 At Or Below 20 Ghz	minus 110 dBm
Minimum Settable Power With 1E1 Above 20 Ghz	minus 120 dBm
Maximum Settable With 1Ea Or 1Eb	+25 dBm
Reference 100 Mhz Out Amplitude	greater than or equal to 10 dBm, 13 dBm typical
Reference 10 Mhz Out Amplitude	9.5 dBm nominal
Internal Timebase Aging Daily	less than plus or minus 0.5 ppb/day after 72 hour warm-up
Internal Timebase Aging Yearly	less than plus or minus 0.1 ppm/year after 72 hour warm-up
Achievable Initial Calibration Accuracy	plus or minus 5e-8
Temperature Effects 20 To 30 C	less than plus or minus 10 ppb
External Reference Input Frequency	1 to 110 MHz sine

PARAMETER	VALUE
External Reference Lock Range	plus or minus 1 ppm nominal
External Reference Amplitude	0 to 10 dBm nominal
Operating Temperature	0 C to 50 C
Storage Temperature	minus 40 C to +70 C
Remote Interfaces	GPiB IEEE-488.2 and 1000BaseT LAN
Control Language	SCPI 1997.0
Software Drivers	IVI.NET IVI-COM IVI-C
Required Frequency Reference Module	M9300A unless option 000
Publication	5992-1928
Bandwidth	up to 1 GHz
Maximum output power	Standard At 2 To 3.6 Ghz F14 F20: 10 dBm

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	minus 40 C to +70 C
Operating temperature	0 C to 50 C
Operating Temperature	0 C to 50 C
Remote Interfaces	GPiB IEEE-488.2 and 1000BaseT LAN
Control Language	SCPI 1997.0
Software Drivers	IVI.NET IVI-COM IVI-C
Required Frequency Reference Module	M9300A unless option 000
Publication	5992-1928 Notes Numeric rows from Keysight M9383A PXIe Microwave Signal Generator data sheet (5992-1928 / KT-M9383A). Maximum power varies by frequency band and 1EA/1EB options.

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	M9383A
Instrument Type	PXIe microwave signal generator
Frequency Range Option F14	1 MHz to 14 GHz
Frequency Range Option F20	1 MHz to 20 GHz
Frequency Range Option F32	1 MHz to 31.8 GHz
Frequency Range Option F44 Without 1Eb	1 MHz to 44 GHz
Frequency Range Option F44 With 1Eb	1 MHz to 40 GHz
Frequency Resolution	0.01 Hz
Internal Rf Modulation Bandwidth	up to 1 GHz
External Iq Rf Modulation Bandwidth	over 2 GHz
Step Attenuator Range Option 1E1	0 dB to 70 dB in 10 dB steps
Maximum Output Power Standard At 2 To 3.6 Ghz F14 F20: 10 dBm	
Maximum Output Power Option 1Ea At 2 To 3.6 Ghz F14 F20: 22 dBm	
Maximum Output Power Standard Above 40 Ghz F44: 8 dBm	
Minimum Settable Power With 1E1 At Or Below 20 Ghz: minus 110 dBm	
Minimum Settable Power With 1E1 Above 20 Ghz: minus 120 dBm	
Specifications	
PARAMETER	VALUE
Maximum Settable With 1Ea Or 1Eb	+25 dBm
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Achievable Initial Calibration Accuracy	plus or minus 5e-8
Temperature Effects 20 To 30 C	less than plus or minus 10 ppb
External Reference Input Frequency	1 to 110 MHz sine
External Reference Lock Range	plus or minus 1 ppm nominal

PARAMETER	VALUE
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Notes

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Ordering Information

OPTION	DESCRIPTION
Option 000	Publication: 5992-1928

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.