

KEYSIGHT TECHNOLOGIES (AGILENT HP)

8902A

The Keysight (formerly Agilent / Hewlett-Packard) 8902A is a high-performance measuring receiver that combines the capabilities of a highly accurate digital power meter, frequency counter, and AM/FM/PM modulation analyzer. It is designed to provide exceptional accuracy and resolution for characterization and calibration across a wide dynamic range, with measurement capabilities up to 1.3 GHz natively and up to 26.5 GHz when paired with an external microwave converter.

SPECIFICATIONS

General

Interfaces	HP-IB (IEEE-488)
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Physical

Power Supply	100/120/220/240 V (+5, -10%), 48 to 66 Hz and 360 to 440 Hz; 200 VA maximum
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Operating Temperature	0 to 55 °C °C
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Weight	23.6 kg kg
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Frequency Specifications

Frequency Range	150 kHz to 1.3 GHz (50 MHz to 26.5 GHz with 11793A converter)
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Tuned RF Level Specifications

Tuned RF Level Dynamic Range	0 to -127 dBm
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Amplitude Modulation (AM) Specifications

AM Accuracy	1%
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Frequency Modulation (FM) Specifications

FM Accuracy	1%
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Phase Modulation (PM) Specifications

PM (Phi-M) Accuracy	3%
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Audio and Baseband Measurements

Audio Measurement Parameters	Level, frequency, and distortion
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Inputs and Interfaces

RF Input Impedance	50 Ω
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Environmental

Storage Temperature	-55 to 75 °C
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Modulation

AM Modulation Rate	20 Hz to 100 kHz
FM Modulation Rate	20 Hz to 200 kHz
Phase Modulation Rate	200 Hz to 20 kHz

Modulation Measurement

AM Depth Measurement Range	0 to 99%
FM Deviation Measurement Range	Up to 400 kHz (carrier frequency dependent)
Phase Modulation (PM) Deviation Range	Up to 400 radians (carrier frequency dependent)

Audio Measurement

Audio High-Pass Filters	50 Hz, 300 Hz
Audio Low-Pass Filters	3 kHz, 15 kHz, >20 kHz
FM De-emphasis Networks	25 µs, 50 µs, 75 µs, 750 µs

Power Measurement

Compatible Sensor Module	HP 11722A
Compatible Power Sensors	HP 8480 Series (via 11722A or direct power measurement)
Power Reference Oscillator Frequency	50 MHz
Power Reference Oscillator Level	1.00 mW (0 dBm)

Connectivity

RF Input Connector	Type-N female
Power Reference Connector	Type-N female
Modulation / Audio Output	Front-panel BNC

TECHNOLOGY

Superheterodyne Receiver

APPLICATIONS

RF and microwave signal analysis, transmitter testing, calibration, and metrology

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