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Data Sheet

August 13, 2026

KEYSIGHT / AGILENT / HP

Keysight / Agilent / HP 11940A Close-Field Probe

HP 11940A Close Field Magnetic Probe 30 MHz to 1 GHz The HP 11940A is a handheld broadband magnetic close-field probe for EMI troubleshooting with spectrum analyzers covering 30 MHz to 1 GHz. It is a calibrated Faraday-loop sensor with high electric-field rejection and a nominal 50 ohm impedance. Reciprocal: it can sense or source magnetic fields. Maximum loop dimension is kept under one-tenth wavelength at 1 GHz so the probe remains calibratable. Use with HP/Keysight spectrum analyzers in the same band for design-lab, production, and QA radiated-emission debug. The HP 11940A is a handheld broadband magnetic close-field probe for EMI troubleshooting with spectrum analyzers covering 30 MHz to 1 GHz. It is a calibrated Faraday-loop sensor with high electric-field rejection and a nominal 50 ohm impedance. Reciprocal: it can sense or source magnetic fields. Maximum loop dimension is kept under one-tenth wavelength at 1 GHz so the probe remains calibratable. Use with HP/Keysight spectrum analyzers in the same band for design-lab, production, and QA radiated-emission debug. PCB and cable EMI hotspot hunting; production-line magnetic-field checks; susceptibility injection when driven as a source; QA troubleshooting from 30 MHz to 1 GHz.



MODEL

**Keysight / Agilent /
HP 11940A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

11940A

LISTING

[https://aumictechlabs.c
om/products/11940a-2/](https://aumictechlabs.com/products/11940a-2/)

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keysight/Agilent/HP 11940A is a handheld near-field probe engineered for identifying and characterizing sources of radiated electromagnetic interference (EMI) at the component and circuit board level. Operating from 30 Hz to 100 kHz, this legacy probe enables precise localization of EMI sources through close-field measurement, making it essential for pre-compliance testing and root cause analysis of electronic device failures. Technical Specifications Frequency Range: 30 Hz to 100 kHz Probe Type: Near-field probe Connector: BNC Impedance: Optimized for standard spectrum analyzer and EMI receiver input impedances Key Features Detects low-level emissions for identification of subtle EMI sources Flexible cable design for maneuverability across device surfaces Handheld form factor suited for laboratory and field environments Durable construction for sustained operational use Typical Applications Pre-compliance EMI testing prior to formal certification Troubleshooting electronic products exhibiting EMI problems Characterizing emission signatures from specific components and circuit traces Design debugging to minimize radiated emissions Compatibility & Integration The 11940A interfaces directly with spectrum analyzers and EMI receivers. Measurement is performed by sweeping the probe across the surface under test; the probe's output displays areas of high emission when connected to a spectrum analyzer. The probe works with effective signal transfer with typical test equipment input impedances.

Features & description

From manufacturer datasheet

Features

- Calibrated magnetic close-field sensor
- High E-field rejection versus H-field response
- 50 ohm nominal, analyzer-ready
- Reciprocal source/sense use
- Handheld form for point probing

Polarization: magnetic-loop orientation relative to the DUT

Cable: 50 ohm coaxial to analyzer input Notes Specs from HP 11940A close-field probe application notes and product literature (30 MHz to 1 GHz magnetic probe, 50 ohm, reciprocal). Confirm 11940A versus 11941A (LF) on the handle. Antenna-factor table belongs on the calibration chart shipped with the probe.

11940A Characteristics / Specifications

PARAMETER	VALUE
Model	11940A
Manufacturer	Hewlett Packard / Agilent / Keysight
Instrument Type	Close field magnetic probe
Series	11940
Alias	11940A; HP 11940A
Frequency range	30 MHz to 1 GHz
Sensor type	magnetic field (Faraday loop)
Impedance	50 ohm nominal
Maximum loop size	less than one tenth wavelength at 1 GHz
Electric field rejection	high (HP 11940A literature)
Reciprocal	source or sense magnetic fields
Return loss typical	better than 15 dB class below 100 MHz (undamaged unit)
Damage check	return-loss degradation indicates internal loop/circuit damage
Analyzer band	spectrum analyzers covering 30 MHz to 1 GHz
Connector	50 ohm coaxial (probe output)
Form	handheld close-field probe
Related 11941A	9 kHz to 30 MHz close-field probe (do not copy 11940A band onto 11941A)
Calibration	magnetic field antenna factor versus frequency (see OEM cal chart)
Use	EMI troubleshooting, not a substitute for a formal EMC chamber antenna
Input caution	observe maximum drive when used as a source to avoid internal damage
Environment	indoor lab/production troubleshooting
Polarization	magnetic-loop orientation relative to the DUT
Cable	50 ohm coaxial to analyzer input
Return loss	typical: better than 15 dB class below 100 MHz (undamaged unit)

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.

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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

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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.