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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 11941A

HP Agilent 11941A Close Field Probe 9 kHz to 30 MHz The HP/Agilent 11941A is a hand-held magnetic close-field probe for EMC diagnostic measurements. OEM Agilent 11945A Close-Field Probe Set product specifications list 9 kHz to 30 MHz, 0.5 W maximum input, antenna-factor accuracy within plus or minus 2 dB in a 377 ohm field impedance, SMA replaceable-barrel connector, and VSWR less than 3:1. Locating magnetic-field radiation from surface currents, slots, cables, and ICs during EMC troubleshooting from 9 kHz to 30 MHz. The HP/Agilent 11941A is a hand-held magnetic close-field probe for EMC diagnostic measurements. OEM Agilent 11945A Close-Field Probe Set product specifications list 9 kHz to 30 MHz, 0.5 W maximum input, antenna-factor accuracy within plus or minus 2 dB in a 377 ohm field impedance, SMA replaceable-barrel connector, and VSWR less than 3:1. Locating magnetic-field radiation from surface currents, slots, cables, and ICs during EMC troubleshooting from 9 kHz to 30 MHz. Calibrated H-field probe with high E-field rejection



MODEL

**Agilent / Keysight
11941A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

11941A

LISTING

<https://aumictechlabs.com/products/11941a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 11941A is a hand-held magnetic field probe designed for precise localized detection and analysis of electromagnetic emissions in electronic circuits and devices. It operates across 9 kHz to 30 MHz, identify magnetic field radiation from surface currents, slots, cables, and integrated circuits during EMC pre-compliance testing and troubleshooting. The probe measures

magnetic field strength at the center of its sense loop rather than at the tip, making it ideal for close-proximity assessment of potential radiating points. Each unit is individually calibrated to ± 2 dB antenna factor accuracy in a $377\ \Omega$ field impedance and supplies five antenna factors for converting dB μ V spectrum analyzer readings to absolute magnetic-field strength in dB μ A/m.

Technical Specifications
Frequency range: 9 kHz – 30 MHz
Maximum input power: 0.5 W
Dielectric breakdown: ± 1 kV (typical)
Connector: SMA with replaceable barrel
VSWR: $< 3:1$
Antenna factor accuracy: ± 2 dB (individually calibrated, $377\ \Omega$ field impedance)
Operating temperature: 0 °C to +40 °C
Cable: 2-meter RG-223 coaxial
Included adapters: SMA (f)-to-Type N (m) and SMA (f)-to-BNC (m)

Key Features
High electric field rejection minimizes measurement error and ensures calibrated, repeatable results
Passive circuitry contributes only thermal noise to the measurement system
Individual calibration with traceable antenna factors
Compact, durable hand-held design

Typical Applications
EMC diagnostic and pre-compliance testing
Signal tracing and electromagnetic interference source identification
Circuit-board-level susceptibility testing when operated with an appropriate signal generator
Localized magnetic field measurement from ICs, cables, and PCB structures

Compatibility & Integration
The 11941A integrates with standard spectrum analyzers and RF measurement instruments via its SMA connector. Supplied adapters enable connection to Type N and BNC-equipped systems. The 2-meter cable supports both bench and field operations.

11941A Characteristics / Specifications

PARAMETER	VALUE
Model	11941A
Instrument Type	Close field magnetic probe
Series Family	Agilent 11940A/11941A/11945A close-field probes
Frequency Range	9 kHz to 30 MHz
Minimum Frequency	9 kHz
Maximum Frequency	30 MHz
Maximum Input Power	0.5 watts
Antenna Factor Accuracy	individually calibrated to within plus or minus 2 dB in a 377 ohm field impedance
Vswr	less than 3:1
Connector Type	SMA, replaceable barrel
Dielectric Breakdown Typical	plus or minus 1 kV typical
Temperature Range For Af Variation	variation over 0 C to +40 C
Furnished Cable Family	2 metre RG-223 coaxial cable with the 11940A/11941A probe documentation
Furnished AdapterNFamily	SMA female to TypeNmale adapter
Furnished Adapter Bnc Family	SMA female to BNC male adapter
Related Higher Frequency Probe	11940A covers 30 MHz to 1 GHz, 0.5 W, plus or minus 2 dB AF, VSWR less than 3:1 typical
Related Probe Set	11945A includes 11940A and 11941A for 9 kHz to 1 GHz
Related Preamplifier Band 1 Frequency	8447F Option H64 band 1: 9 kHz to 50 MHz
Related Preamplifier Band 1 Noise Figure	less than 7.0 dB
Related Preamplifier Band 1 Gain	28 dB
Related Preamplifier Band 1 Flatness	plus or minus 2.0 dB
Related Preamplifier Band 2 Frequency	8447F Option H64 band 2: 100 kHz to 1.3 GHz
Related Preamplifier Band 2 Gain	26 dB
Related Preamplifier Band 2 Flatness	plus or minus 1.5 dB

PARAMETER	VALUE
Related Preamplifier Connectors	TypeNfemale both bands
Measurement Impedance Class	377 ohm field impedance for antenna-factor calibration

11941A Specifications

PARAMETER	VALUE
HP Agilent 11941A Close Field Probe 9 kHz to 30 MHz	Overview
Applications	Locating magnetic-field radiation from surface currents, slots, cables, and ICs during EMC troubleshooting from 9 kHz to 30 MHz.
Individually calibrated antenna factor	Shipped with 2 m RG-223 cable and SMA adapters in the 11945A set documentation
Technical Specifications	Model: 11941A

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 list 9 kHz to 30 MHz, 0.5 W maximum input, antenna-factor accuracy within plus or minus 2 dB in a 377 ohm field impedance, SMA replaceable-barrel connector, and VSWR less than 3:1.	
Applications	
Locating magnetic-field radiation from surface currents, slots, cables, and ICs during EMC troubleshooting from 9 kHz to 30 MHz.	
Key Features	
Calibrated H-field probe with high E-field rejection	
Individually calibrated antenna factor	
Shipped with 2 m RG-223 cable and SMA adapters in the 11945A set documentation	
Pairs with 11940A to cover 9 kHz to 1 GHz as 11945A	
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Notes
11941A rows from Agilent 11945A Close-Field Probe Set product specifications, 11941A table. Related 11940A and 8447F Option H64 rows are adjacent tables on the same OEM sheet, labeled as related, not as 11941A limits. HP EMC accessory catalog confirms 2 m RG-223 and SMA adapters with each probe.

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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NIST-traceable calibration · SAM registered ·
30-day returns
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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.