

KEYSIGHT TECHNOLOGIES (AGILENT HP)

11945A

The Keysight (Agilent) 11945A is a close-field probe set designed for electromagnetic compatibility (EMC) measurements and troubleshooting over the 9 kHz to 1 GHz frequency range. It contains two passive, dual-loop magnetic-field (H-field) probes, the 11940A and 11941A, each optimized for specific frequency bands and individually calibrated for high precision. The probes feature exceptional electric-field (E-field) rejection and have their unique calibration factors conveniently plotted directly onto each probe body.

SPECIFICATIONS

Physical

Operating Temperature	0 °C to +55 °C °C
Dimensions (W×H×D)	279 mm × 102 mm × 337 mm (carrying case) mm
Weight	1.4 kg kg
Shipping Weight	2.3 kg
Option E51 Net Weight	3.5 kg
Option E51 Shipping Weight	4.5 kg

System Performance

Combined Frequency Range	9 kHz to 1 GHz
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Kit Contents

Included Probe Models	11940A (30 MHz to 1 GHz), 11941A (9 kHz to 30 MHz)
Probe 1 Model	11940A
Probe 2 Model	11941A
Included Carrying Case	Yes (hard carrying case with custom foam insert)

11940A Specifications

Probe 1 Frequency Range	30 MHz to 1 GHz
Probe 1 Maximum RF Input Power	0.5 W
Probe 1 Output Impedance	50 ohms (nominal)
Probe 1 Output Connector	SMA (female)
Probe 1 Calibration	Individually calibrated; calibration data plotted on probe body

11941A Specifications

Probe 2 Frequency Range	9 kHz to 30 MHz
Probe 2 Maximum RF Input Power	0.5 W
Probe 2 Output Impedance	50 ohms (nominal)
Probe 2 Output Connector	SMA (female)
Probe 2 Calibration	Individually calibrated; calibration data plotted on probe body

Design & Construction

Probe Sensor Design	Dual-loop shielded H-field (magnetic field) sensor
E-Field Rejection	Typically > 30 dB

Calibration

Calibration Traceability	Traceable to US National Institute of Standards and Technology (NIST)
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Environmental

Storage Temperature	-40 °C to +75 °C
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Option E51 Preamplifier

Option E51 Preamplifier Gain	30 dB
Option E51 Preamplifier Frequency Range	9 kHz to 1 GHz
Option E51 Preamplifier Part Number	11945-60001
Option E51 Preamplifier Gain Flatness	±1.5 dB
Option E51 Preamplifier Noise Figure	< 7 dB
Option E51 Preamplifier Input Connector	BNC female
Option E51 Preamplifier Output Connector	BNC female
Option E51 Preamplifier Input Impedance	50 Ω nominal
Option E51 Preamplifier Output Impedance	50 Ω nominal
Option E51 Preamplifier DC Power Requirement	15 Vdc, 120 mA

Option E51 Power Supply

Option E51 Power Supply Input Voltage	115 V AC / 230 V AC (option dependent, ±10%, 50/60 Hz)
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Probe 1 (11940A)

Probe 1 Length	205 mm (8.1 in)
Probe 1 Tip Width	19 mm (0.75 in)
Probe 1 Tip Thickness	11 mm (0.43 in)
Probe 1 Maximum Safe Magnetic Field	0.2 A/m
Probe 1 Calibration Accuracy	±2 dB (in a 50 Ω system)

Probe 2 (11941A)

Probe 2 Length	205 mm (8.1 in)
Probe 2 Tip Width	19 mm (0.75 in)
Probe 2 Tip Thickness	11 mm (0.43 in)
Probe 2 Maximum Safe Magnetic Field	15 A/m (9 kHz to 100 kHz), 1.6 A/m (100 kHz to 30 MHz)
Probe 2 Calibration Accuracy	±2 dB (in a 50 Ω system)

TECHNOLOGY

EMC Near-Field Probing

APPLICATIONS

Electromagnetic Interference (EMI) Diagnostics and Troubleshooting

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