

KEYSIGHT TECHNOLOGIES (AGILENT HP)

85053A

The Keysight Technologies (Agilent HP) 85053A is a 3.5 mm verification kit designed to verify the error-corrected measurement performance of Vector Network Analyzer systems, specifically the HP 8510 and other compatible high-performance VNAs. The kit includes precision standards with traceable measurement data for verifying system accuracy.

SPECIFICATIONS

Physical

Operating Temperature	20 °C to 26 °C °C
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General Specifications

Frequency Range	300 kHz to 26.5 GHz
Connector Type	Precision 3.5 mm
System Impedance	50 Ω
Compatible Vector Network Analyzers	HP 8510 series, HP 8720 series, Keysight PNA series
Compatible Calibration Kits	HP/Keysight 85052B, 85052D (3.5 mm)
Recommended Calibration Interval	12 months

Kit Contents and Standards

Attenuators Included	20 dB and 40 dB precision attenuators
Airlines Included	7.5 cm beadless coaxial airline
Mismatch Airlines Included	7.5 cm beadless stepped impedance airline
Data Media Provided	Data disk / storage media containing calibration and measurement data
Tools Included	None (uses tools from calibration kit)

Standard Device Details

20 dB Attenuator Part Number	08505-60113
40 dB Attenuator Part Number	08505-60114
50 Ω Airline Part Number	85053-60005
25 Ω Stepped Airline Part Number	85053-60006

Electrical Performance

Nominal Impedance of Standards	50 Ω (except mismatch airline)
Stepped Airline Nominal Impedance	25 Ω
Maximum Input Power	1 W (average) for attenuators

Mechanical and Dimensions

Airline Length	7.5 cm
Airline Center Conductor Diameter	1.52 mm (nominal)
Airline Outer Conductor Inside Diameter	3.50 mm (nominal)
Connector Gender Configuration	Precision male to female on attenuators, sexless outer/mating inner on airlines

Environmental & Metrology

Calibration Reference Temperature	23 °C ± 1 °C
Storage Temperature Range	-40 °C to +75 °C
Traceability	Traceable to National Metrology Institutes (NIST)
Relative Humidity Range (Operating)	Non-condensing

TECHNOLOGY

Coaxial RF & Microwave Calibration

APPLICATIONS

Vector Network Analyzer error-corrected performance verification

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