

KEYSIGHT TECHNOLOGIES (AGILENT HP)

85050B

The Keysight (formerly Agilent) 85050B is a high-precision 7 mm mechanical calibration kit designed to characterize the systematic errors of compatible vector network analyzers from DC to 18 GHz. This kit includes a comprehensive suite of calibration standards, torque wrenches, connector gages, sex-change adapters, and calibration definitions on disk to ensure reliable, high-performance two-port calibrations.

SPECIFICATIONS

Physical

Operating Temperature	15 to 35 °C °C
Dimensions (W×H×D)	368 mm × 108 mm × 311 mm mm

General Specifications

Frequency Range	DC to 18 GHz
Nominal Impedance	50 Ω
Connector Type	7 mm (APC-7)
Connector Gender	Sexless
Calibration Methods Supported	Full Two-Port Calibration
Compatible Vector Network Analyzers	Agilent / Keysight network analyzers

Open Standard Specifications

Open Standard Frequency Range	DC to 18 GHz
Open Standard Phase Deviation (DC to 2 GHz)	±0.3° from nominal

Short Standard Specifications

Short Standard Frequency Range	DC to 18 GHz
Short Standard Phase Deviation (DC to 2 GHz)	±0.2° from nominal

Fixed Load Standard Specifications

Lowband Fixed Load Frequency Range	None (the kit contains a single broadband fixed load operating from DC to 18 GHz)
Broadband Fixed Load Frequency Range	DC to 18 GHz
Broadband Fixed Load Return Loss	≥ 52 dB (DC to 2 GHz), ≥ 40 dB (2 to 18 GHz)

Sliding Load Standard Specifications

Sliding Load Frequency Range	2 to 18 GHz
Sliding Load Return Loss	≥ 52 dB (2 to 18 GHz)

Kit Contents & Physical Properties

Torque Wrenches	Included for proper connection of standards
Adapters	None (7 mm APC-7 connectors are sexless; no adapters are included in the kit)
Connector Gages	Included for verifying and maintaining the connector interface
Calibration Definition Media	Standard definitions on disk for loading into VNA

Environmental

Storage Temperature	-40 to +75 °C
Calibration Temperature Range	23 ± 3 °C
Relative Humidity	Up to 95% at 40 °C (non-condensing)

Accessories

Torque Wrench Torque Setting	1.35 N-m (12 in-lb)
Torque Wrench Connector Size	3/4 in

Performance

Broadband Fixed Load Return Loss (DC to 2 GHz)	≥ 52 dB (SWR ≤ 1.005)
Broadband Fixed Load Return Loss (2 to 18 GHz)	≥ 40 dB (SWR ≤ 1.020)

Kit Contents

Included Calibration Standards	APC-7 open circuit, APC-7 short circuit, APC-7 broadband fixed load, APC-7 sliding load
Included Tools & Accessories	APC-7 connector gage, 3/4 in torque wrench, collet extractor, spare collets, spindle wrench

TECHNOLOGY

RF & Microwave Calibration

APPLICATIONS

Vector Network Analyzer (VNA) Calibration

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