

KEYSIGHT TECHNOLOGIES (AGILENT HP)

85031B

The Keysight 85031B is a precision 7 mm calibration kit designed for vector network analyzers (VNAs) operating in the DC to 6 GHz frequency range. This kit features high-performance APC-7 genderless connectors and is primarily used to perform full one-port or two-port calibrations (SOLT method) to minimize systematic measurement errors.

SPECIFICATIONS

General

Interfaces	None (passive mechanical standards)
Frequency Range	DC to 6 GHz
Nominal Impedance	50 Ω
Connector Type	APC-7 (7 mm)
Connector Gender	Genderless (APC-7)
Calibration Method Support	SOLT (Short-Open-Load-Thru)
Compatible Vector Network Analyzers	Keysight / Agilent VNAs (with APC-7 test ports or appropriate adapters)
Included Accessories	Collet extractor tool, storage case

Physical

Power Supply	None (passive mechanical standards)
Operating Temperature	15 to 35 °C °C
Dimensions (W×H×D)	229 mm x 51 mm x 140 mm mm
Weight	0.7 kg kg

Open Standard

Open Standard Part Number	85031-60001 (dual-ended open/short unit)
Open Frequency Range	DC to 6 GHz
Open Electrical Delay	0 ps
Open C0 Coeff (10^{-15} F)	92.85
Open C1 Coeff (10^{-27} F/Hz)	0.0
Open C2 Coeff (10^{-36} F/Hz ²)	0.0
Open C3 Coeff (10^{-45} F/Hz ³)	0.0

Short Standard

Short Standard Part Number	85031-60001 (dual-ended open/short unit)
Short Frequency Range	DC to 6 GHz
Short Electrical Delay	0 ps
Short L0 Coeff (10^-12 H)	0.0
Short L1 Coeff (10^-24 H/Hz)	0.0
Short L2 Coeff (10^-33 H/Hz^2)	0.0
Short L3 Coeff (10^-42 H/Hz^3)	0.0

Load Standard

Broadband Load Standard Part Number	85031-60002
Broadband Load Quantity	2
Broadband Load Frequency Range	DC to 6 GHz
Broadband Load Return Loss	≥ 40 dB (DC to 6 GHz)
Broadband Load Impedance	50 Ω

Environmental & Physical

Recommended Calibration Cycle	1 year
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Open Standard Specifications

Open Phase Deviation	±1.5° from nominal
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Short Standard Specifications

Short Phase Deviation	±1.0° from nominal
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Environmental

Calibration Temperature Range	20 °C to 26 °C
Storage Temperature Range	-40 °C to +75 °C

TECHNOLOGY

Coaxial RF/Microwave Calibration

APPLICATIONS

VNA System 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.