



**Contents**

Device	Part number	Quantity	Calibration Option <sup>a</sup>
Open circuit plug	P9S12L-000D3	1	FC
Open circuit jack	P9K12L-000D3	1	FC
Short circuit plug	P9S12S-000D3	1	FC
Short circuit jack	P9K12S-000D3	1	FC
Calibration load plug	P9S150-C10D3	1	FC
Calibration load jack	P9K150-C10D3	1	FC
Calibration adaptor plug/plug	P9S121-S20D3	1	FC
Calibration adaptor jack/jack	P9K121-K20D3	1	FC
Combi wrench	03W008-000	1	-
Torque wrench	03W021-000	1	FC
Gauge jack (including gauge block)	P9W00S-000	1	FC
Gauge plug (including gauge block)	P9W00K-000	1	FC

a. See "Declaration of calibration options" for explanation.

**Documentation**

This kit is delivered with

- **USB-Stick**  
Standard Definitions as data files for Vector Network Analyzer Families PNA (Keysight/Agilent) and ZVA (Rohde&Schwarz). Calibration Certificate as PDF-file.
- **Standard Definitions Cards**  
Printed Standard Definitions that can be used on nearly all Vector Network Analyzers.
- **Kit Info Card**  
Handling precautions and information for installing Standard Definitions on a Vector Network Analyzer.
- **Calibration Certificate**  
Details see "Declaration of calibration options"
- **Operating Manual**

**Electrical specifications**

This specification covers electrical key values for the main calibration standards of the calibration kit. Specific datasheets are available for each component among the part number.

Calibration standard	Frequency	Parameter	Specification
<b>Opens<sup>b</sup></b> (plug and jack)	DC to ≤ 40 GHz > 40 GHz to ≤ 65 GHz > 65 GHz to ≤ 90 GHz	Error from Nominal Phase	≤ 3.0° ≤ 4.0° ≤ 5.0°
<b>Shorts<sup>b</sup></b> (plug and jack)	DC to ≤ 18 GHz > 18 GHz to ≤ 40 GHz > 40 GHz to ≤ 65 GHz > 65 GHz to ≤ 90 GHz	Error from Nominal Phase	≤ 2.0° ≤ 3.0° ≤ 4.0° ≤ 5.0°
<b>Calibration loads</b> (plug and jack)	DC to ≤ 18 GHz > 18 GHz to ≤ 40 GHz > 40 GHz to ≤ 65 GHz > 65 GHz to ≤ 90 GHz	Return Loss	≥ 25 dB ≥ 20 dB ≥ 16 dB ≥ 10 dB
<b>Calibration adaptors</b> (plug/plug and jack/jack)	DC to ≤ 20 GHz > 20 GHz to ≤ 40 GHz > 40 GHz to ≤ 90 GHz	Return Loss	≥ 30 dB ≥ 22 dB ≥ 20 dB

b. The specifications for opens and shorts are given as allowed deviation from nominal model as defined in calibration certificate included with your kit.

**Declaration of calibration options**

**Factory Calibration**

Standard delivery for this kit includes a Factory Calibration. The Calibration Certificate issued reports individual calibration results, **traceable to Rosenberger standards**, national / international standards are not available. Model based standard definitions of the calibration standards are reported in Agilent/Keysight, Rohde & Schwarz and Anritsu compatible VNA format.

**Accredited Calibration**

Not available.

*For further, more detailed information see application note AN001 on the Rosenberger homepage.*

**Calibration interval**

Recommendation 12 months

**Recommended accessories**

- Rosenberger Test Port Adaptor
- Rosenberger VNA Test cable kit and Microwave Cable Assemblies

*For further, more detailed information please visit our homepage [www.rosenberger.com](http://www.rosenberger.com).*

While the information has been carefully compiled to the best of our knowledge, nothing is intended as representation or warranty on our part and no statement herein shall be construed as recommendation to infringe existing patents. In the effort to improve our products, we reserve the right to make changes judged to be necessary.

Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
F. Reiner	17.12.18	H. Babinger	27.11.19	b00	19-2207	A. Youmsi	27.11.19

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