



Contents

| Device | Part number | Quantity | Calibration Option ^a |
|---------------------------------------|--------------|----------|---------------------------------|
| 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 |
|--|--|-----------------------------|--|
| Opens^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° |
| Shorts^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° |
| Calibration loads (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 |
| Calibration adaptors (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.

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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