



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 |

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

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RF_35/09.14/6.2

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). S1P-files for Open, Short and Load calibration standards. Calibration Certificate as PDF-file.
- **Standard Definitions Cards**
Model based Standard Definitions for the Calibration Adapters. Overview of electrical kit components.
- **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

These electrical specifications are only valid when the specific VNA files or the specific S1P-files are used as standard definitions. They include measurement uncertainties as well as guard bands to cover some tear and wear of the calibration standards.

Individual datasheets with further specifications and information are available for each component of this calibration kit.

| Residual System Data* | Frequency | Specification (plug and jack) |
|------------------------------|----------------------|---|
| Directivity | 0.01 GHz to ≤ 40 GHz | ≥ 33 dB |
| | > 40 GHz to ≤ 80 GHz | ≥ 30 dB |
| | > 80 GHz to ≤ 90 GHz | ≥ 27 dB |
| Source Match | 0.01 GHz to ≤ 30 GHz | ≥ 32 dB |
| | > 30 GHz to ≤ 60 GHz | ≥ 28 dB |
| | > 60 GHz to ≤ 80 GHz | ≥ 25 dB |
| | > 80 GHz to ≤ 90 GHz | ≥ 23 dB |
| Reflection Tracking | 0.01 GHz to ≤ 20 GHz | ≤ 0.15 dB |
| | > 20 GHz to ≤ 40 GHz | ≤ 0.20 dB |
| | > 40 GHz to ≤ 60 GHz | ≤ 0.25 dB |
| | > 60 GHz to ≤ 80 GHz | ≤ 0.35 dB |
| | > 80 GHz to ≤ 90 GHz | ≤ 0.45 dB |

* Residual System Data are also called Effective System Data

Declaration of calibration options

Factory Calibration

Standard delivery for this kit includes a Factory Calibration. All devices marked with “FC” in the Content table above are reported in a Calibration Certificate with their individual calibration results, traceable to national / international standards. Data based definitions of the calibration standards are reported as data files for Vector Network Analyzer Families PNA (Keysight/Agilent) and ZVA (Rohde&Schwarz) as well as S1P-files for Open, Short and Load calibration standards.

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 Gauge Kit P9GK0KS-010
- 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.

For the installation of the electrotechnical equipment, particular electrotechnical expertise is required.



| Draft | Date | Approved | Date | Rev. | Engineering change number | Name | Date |
|-----------|----------|-------------|----------|------|---------------------------|---------------|----------|
| F. Reiner | 17.12.18 | H. Babinger | 17.04.23 | d00 | 23-0667 | T. Börgerding | 17.04.23 |

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