| Technical Data Sheet |                                 | Rosenberger           |  |
|----------------------|---------------------------------|-----------------------|--|
| 7-16                 | Calibration Kit<br>Full Version | 60CK001-150           |  |
|                      | <image/> <caption></caption>    | from original product |  |

### Contents

| Device                                      | Part number  | Quantity | Calibration Option <sup>a</sup> |
|---|--------------|----------|---------------------------------|
| Open circuit plug                           | 60S12L-000S3 | 1        | FC / AC                         |
| Open circuit jack                           | 60K12L-000S3 | 1        | FC / AC                         |
| Short circuit plug                          | 60S12S-000S3 | 1        | FC / AC                         |
| Short circuit jack                          | 60K12S-000S3 | 1        | FC / AC                         |
| Calibration load plug                       | 60S150-C10S3 | 1        | FC / AC                         |
| Calibration load jack                       | 60K150-C10S3 | 1        | FC / AC                         |
| Calibration adaptor plug/plug               | 60S121-S20S3 | 1        | FC / AC                         |
| Calibration adaptor jack/jack               | 60K121-K20S3 | 1        | FC / AC                         |
| Calibration adaptor RPC-N plug to 7-16 plug | 05S160-S20S3 | 1        | FC / AC                         |
| Calibration adaptor RPC-N jack to 7-16 jack | 05K160-K20S3 | 1        | FC / AC                         |
| Combi wrench                                | 60W013-000   | 1        | -                               |
| Torque wrench                               | 60W000-003   | 1        | FC                              |
| Gauge jack<br>(including gauge block)       | 60W00K-000   | 1        | FC                              |
| Gauge plug<br>(including gauge block)       | 60W00S-000   | 1        | FC                              |

RFB00035/12.20/6.4

Tel. : +49 8684 18-0 Email : info@rosenberger.com

| <ul> <li>(Rohde&amp;Schwarz). Calibrat</li> <li>Standard Definitions Ca<br/>Printed Standard Definition</li> </ul>  |    | Rosenberger |  |  |  |  |
|---|----|-------------|--|--|--|--|
| <ul> <li>This kit is delivered with</li> <li>USB-Stick<br/>Standard Definitions as da<br/>(Rohde&amp;Schwarz). Calibrat</li> <li>Standard Definitions Ca<br/>Printed Standard Definition</li> </ul> | it | 60CK001-150 |  |  |  |  |
| This kit is delivered with  |    |             |  |  |  |  |

**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</b> <sup>b</sup><br>(plug and jack)                       | DC to $\leq$ 4 GHz<br>> 4 GHz to $\leq$ 8 GHz  | Error from<br>Nominal Phase | ≤ 1.0°<br>≤ 1.5°   |  |
| <b>Shorts</b> <sup>b</sup><br>(plug and jack)                      | $\begin{array}{rrrr} DC & to & \leq 4 \ GHz \\ \textbf{> 4 } GHz & to & \leq 8 \ GHz \end{array}$    | Error from<br>Nominal Phase | ≤ 1.0°<br>≤ 1.5°   |  |
| Calibration loads<br>(plug and jack)                               | $\begin{array}{rrrr} DC & to & \leq 4 \ GHz \\ \textbf{>} \ 4 \ GHz & to & \leq 8 \ GHz \end{array}$ | Return Loss                 | ≥ 40 dB<br>≥ 38 dB |  |
| Calibration adaptors<br>(plug/plug)                                | $\begin{array}{rrrr} DC & to & \leq 4 \ GHz \\ \textbf{>} \ 4 \ GHz & to & \leq 8 \ GHz \end{array}$ | Return Loss                 | ≥ 40 dB<br>≥ 36 dB |  |
| Calibration adaptors<br>(jack/jack)                                | $\begin{array}{rrrr} DC & to & \leq 4 \ GHz \\ \textbf{>} 4 \ GHz & to & \leq 8 \ GHz \end{array}$   | Return Loss                 | ≥ 38 dB<br>≥ 34 dB |  |
| Calibration adaptors<br>RPC-N to 7-16<br>(plug/plug and jack/jack) | $\begin{array}{rrrr} DC & to & \leq 4 \ GHz \\ \textbf{> 4 } GHz & to & \leq 8 \ GHz \end{array}$    | Return Loss                 | ≥ 36 dB<br>≥ 33 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.

| Rosenberger Hochfrequenztechnik GmbH & Co. KG |                    |         |  |  |
|---|--------------------|---------|--|--|
| P.O.Box 1260                                  | D-84526 Tittmoning | Germany |  |  |
| www.rosenberger.com                           |                    |         |  |  |

## **Technical Data Sheet**

7-16

Calibration Kit **Full Version** 

# Rosenberger

## 60CK001-150

#### 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. Model based definitions of the calibration standards are reported in Agilent/Keysight, Rohde & Schwarz and Anritsu compatible VNA format.

#### **Accredited Calibration**

Optional this kit can be delivered with an Accredited Calibration (DAkkS) having the highest confidence in the traceability. All devices marked with "AC" in the Content table above are reported in a DAkkS Calibration Certificate with their individual calibration results in a complex format, traceable to national / international standards. Model based definitions of the calibration standards are reported in Agilent/Keysight, Rohde & Schwarz and Anritsu VNA format as well as in dense data sets needed for data based calibration kits. The uncertainties are a little bit smaller than in a Factory Calibration.

All devices marked with "FC" only cannot be calibrated under accreditation. They are factory calibrated as described above.

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.

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



|  | -          | -           |          | -    |                                     |              |          |
|--|------------|-------------|----------|------|-------------------------------------|--------------|----------|
| Draft  | Date       | Approved    | Date     | Rev. | Engineering change number           | Name         | Date     |
| Martin Moder   | 12.10.2015 | Chr. Janßen | 6.7.2022 | c00  | 20-1927                             | B. Wollitzer | 6.7.2022 |
| Rosenberger Hochfrequenztechnik GmbH & Co. KG<br>P.O.Box 1260 D-84526 Tittmoning Germany |            |             |          |      |                                     |              | Page     |
| www.rosenberger.com  |            |             |          |      | Email : <u>info@rosenberger.com</u> |              |          |
| öffentlich I n   | ublic      |             |          |      |                                     |              |          |

RFB00035/12.20/6.4