



Picture shows similar calibration kit

## Contents

Device	Part number	Quantity	Calibration Option <sup>a</sup>
Open circuit plug	74S12L-001S3	1	FC
Open circuit jack <sup>b</sup>	74K12L-001S3	1	FC
Short circuit plug	74S12S-001S3	1	FC
Short circuit jack <sup>b</sup>	74K12S-001S3	1	FC
Calibration load plug	74S150-C11S3	1	FC
Calibration load jack <sup>b</sup>	74K150-C11S3	1	FC
Calibration adaptor plug/plug	74S121-S21S3	1	FC
Calibration adaptor jack/jack <sup>b</sup>	74K121-K21S3	1	FC
Calibration adaptor plug/jack <sup>c</sup> "full range adaptor"	74S121-K22S3	2	FC
Combi wrench	53W011-000	1	-
Torque wrench	74W021-000	1	FC

- a. See "Declaration of calibration options" for explanation.  
b. Permitted male pin diameter 0.76 mm to 0.86 mm. Connecting a F plug with larger male pin diameter will damage female contact fingers of this device. Use "full range adaptor" 74S121-K22S3 instead.  
c. Permitted full range male pin diameter 0.64 mm to 1.13 mm according to IEC 61169-24

## 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 specifications for the calibration standards of the calibration kit. Specific and more detailed datasheets are available for each kit device among the part number.

Calibration standard	Frequency	Parameter	Specification
<b>Opens<sup>d</sup></b> (plug and jack)	DC to $\leq 4$ GHz > 4 GHz to $\leq 6$ GHz	Error from Nominal Phase	$\leq 1.0^\circ$ $\leq 1.5^\circ$
<b>Shorts<sup>d</sup></b> (plug and jack)	DC to $\leq 4$ GHz > 4 GHz to $\leq 6$ GHz	Error from Nominal Phase	$\leq 1.0^\circ$ $\leq 1.5^\circ$
<b>Calibration loads</b> (plug and jack)	DC to $\leq 4$ GHz > 4 GHz to $\leq 6$ GHz	Return Loss	$\geq 40$ dB $\geq 35$ dB
<b>Calibration adaptors</b> (plug/plug and jack/jack)	DC to $\leq 4$ GHz > 4 GHz to $\leq 6$ GHz	Return Loss	$\geq 32$ dB $\geq 30$ dB
<b>Calibration adaptors</b> (plug/jack) "full range adaptor"	DC to $\leq 3$ GHz > 3 GHz to $\leq 4$ GHz > 4 GHz to $\leq 6$ GHz	Return Loss	$\geq 30$ dB $\geq 27$ dB $\geq 20$ dB

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

Technical Data Sheet				Rosenberger																		
F 75 Ω		Calibration Kit Industrial Version		74CK011-170																		
<div>Declaration of calibration options</div> <div>Factory Calibration</div> <p>Standard delivery for this kit includes a Factory Calibration. The Calibration Certificate issued reports individual calibration results, <b>traceable to Rosenberger standards</b>, national / international standards are not available. Model based standard definitions of the calibration standards are reported in Agilent/Keysight, Rohde &amp; Schwarz and Anritsu compatible VNA format.</p> <div>Accredited Calibration</div> <p>Not available.</p> <p>For further, more detailed information see application note AN001 on the Rosenberger homepage.</p>																						
<div>Calibration interval</div> <div>Recommendation12 months</div>																						
<div>Recommended accessories</div> <div>- Rosenberger Test Port Adaptor</div> <div>- Rosenberger VNA Test cable kit and Microwave Cable Assemblies</div>																						
<div>Recommended adaptor</div> <table><tr><td>RPC-N (75) to F</td><td>RPC-N(75)jack – F jack</td><td>P5K174-K21S3</td></tr><tr><td></td><td>RPC-N(75)jack – F plug</td><td>P5K174-S21S3</td></tr><tr><td></td><td>RPC-N(75)plug – F jack</td><td>P5S174-K21S3</td></tr><tr><td></td><td>RPC-N(75)plug – F plug</td><td>P5S174-S21S3</td></tr><tr><td>F to F</td><td>F plug – F jack</td><td>74S121-K21S3</td></tr></table> <p>For further, more detailed information please visit our homepage <a href="http://www.rosenberger.com">www.rosenberger.com</a>.</p>								RPC-N (75) to F	RPC-N(75)jack – F jack	P5K174-K21S3		RPC-N(75)jack – F plug	P5K174-S21S3		RPC-N(75)plug – F jack	P5S174-K21S3		RPC-N(75)plug – F plug	P5S174-S21S3	F to F	F plug – F jack	74S121-K21S3
RPC-N (75) to F	RPC-N(75)jack – F jack	P5K174-K21S3																				
	RPC-N(75)jack – F plug	P5K174-S21S3																				
	RPC-N(75)plug – F jack	P5S174-K21S3																				
	RPC-N(75)plug – F plug	P5S174-S21S3																				
F to F	F plug – F jack	74S121-K21S3																				
<p>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.</p>																						
Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date															
H. Babinger	07.05.19	S. Andorfer	22.11.19	a00	19-s297	A. Youmsi	22.11.19															
Rosenberger Hochfrequenztechnik GmbH & Co. KG P.O.Box 1260 D-84526 Tittmoning Germany <a href="http://www.rosenberger.com">www.rosenberger.com</a>				Tel. : +49 8684 18-0 Email : <a href="mailto:info@rosenberger.com">info@rosenberger.com</a>			Page  3 / 3															

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Rosenberger:

74CK011-170