

MSOT (4-in-1) and MSO (3-in-1)

Compact Calibration Kits

TEST & MEASUREMENT





Series Overview

MSOT (4-in-1) Compact Calibration Kits

The 4-in-1 mechanical calibration kits combine an open, short, load and thru element in a compact unit for a complete MSOT calibration of two or more port vector network analyzers.

- 4.3-10
- RPC-N
- RPC-N, 75 Ω
- RPC-3.50
- RPC-2.92
- RPC-2.40
- RPC-1.85
- RPC-1.35

MSO (3-in-1) Compact Calibration Kits

The 3-in-1 mechanical calibration kits combine an open, short and load in a compact unit for a complete MSO calibration of single port vector network analyzers.

- 7-16
- 4.3-10
- 4.1-9.5
- N
- RPC-N
- RPC-N, 75 Ω
- RPC-3.50
- RPC-2.92
- RPC-2.40
- RPC-1.85
- RPC-1.35

The following tables show the complete range of Rosenberger compact calibration kits. For specific details refer to the technical datasheets in our online catalog:



Compact Calibration Kits

Rosenberger provides a wide range of compact calibration kits for MSOT (4-in-1) and MSO (3-in-1) calibrations. These compact calibration kits combine all necessary calibration standards in one unit – small, easy to handle and light weight.

All compact calibration kits come in a hard shell case with general model based standard definitions of the calibration standards reported in a Agilent/Keysight, Rohde&Schwarz and Anritsu compatible VNA format on a standard definition card. Deviant of this, RPC-1.35 calibration kits come with data based definitions of the calibration standards. 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.

Benefits

- All necessary calibration standards in one unit
- Small and easy to handle
- Light weight
- Delivered with lanyard in a hardshell case and standard definition card

Applications

- Calibration of 1-, 2- or more-port vector network analyzers



Product Portfolio

MSOT (4-in-1) Compact Calibration Kits

50 Ω Impedance

Rosenberger No.	Gender	Interface	Frequency Range	Open Deviation from nominal phase	Short Deviation from nominal phase	Load Return Loss	Thru Return Loss
64K30R-MSOTS3	female	4.3-10	DC to 4 GHz	$\leq 2.5^\circ$	$\leq 2.5^\circ$	≥ 40 dB	≥ 36 dB
64S30R-MSOTS3	male		4 GHz to 6 GHz	$\leq 2.5^\circ$	$\leq 2.5^\circ$	≥ 35 dB	≥ 30 dB
			6 GHz to 12 GHz	$\leq 3.0^\circ$	$\leq 3.0^\circ$	≥ 25 dB	≥ 20 dB
05K30R-MSOTS3	female	RPC-N	DC to 6 GHz	$\leq 2.0^\circ$	$\leq 1.5^\circ$	≥ 42 dB	≥ 40 dB
05S30R-MSOTS3	male		6 GHz to 9 GHz	$\leq 3.0^\circ$	$\leq 2.0^\circ$	≥ 36 dB	≥ 36 dB
			9 GHz to 18 GHz	$\leq 4.0^\circ$	$\leq 2.5^\circ$	≥ 30 dB	≥ 32 dB
03K30R-MSOTS3	female	RPC-3.50	DC to 4 GHz	$\leq 1.0^\circ$	$\leq 1.0^\circ$	≥ 40 dB	≥ 34 dB
03S30R-MSOTS3	male		4 GHz to 8 GHz	$\leq 2.0^\circ$	$\leq 2.0^\circ$	≥ 35 dB	≥ 32 dB
			8 GHz to 26.5 GHz	$\leq 3.0^\circ$	$\leq 3.0^\circ$	≥ 30 dB	≥ 30 dB
02K30R-MSOTS3	female	RPC-2.92	DC to 4 GHz	$\leq 1.5^\circ$	$\leq 1.5^\circ$	≥ 40 dB	≥ 32 dB
02S30R-MSOTS3	male		4 GHz to 26.5 GHz	$\leq 4.0^\circ$	$\leq 4.0^\circ$	≥ 28 dB	≥ 30 dB
			26.5 GHz to 40 GHz	$\leq 5.0^\circ$	$\leq 5.0^\circ$	≥ 25 dB	≥ 28 dB
02K34R-MSOTS3	female	RPC-2.92	DC to 4 GHz	$\leq 1.5^\circ$	$\leq 1.5^\circ$	≥ 40 dB	≥ 32 dB
02S34R-MSOTS3	male		4 GHz to 26.5 GHz	$\leq 4.0^\circ$	$\leq 4.0^\circ$	≥ 28 dB	≥ 30 dB
			26.5 GHz to 43.5 GHz	$\leq 5.0^\circ$	$\leq 5.0^\circ$	≥ 25 dB	≥ 28 dB
09K30R-MSOTS3	female	RPC-2.40	DC to 4 GHz	$\leq 2.0^\circ$	$\leq 1.5^\circ$	≥ 36 dB	≥ 30 dB
09S30R-MSOTS3	male		4 GHz to 26.5 GHz	$\leq 4.0^\circ$	$\leq 3.0^\circ$	≥ 30 dB	≥ 24 dB
			26.5 GHz to 50 GHz	$\leq 6.0^\circ$	$\leq 4.5^\circ$	≥ 22 dB	≥ 17 dB
08K30R-MSOTS3	female	RPC-1.85	DC to 4 GHz	$\leq 2.0^\circ$	$\leq 2.0^\circ$	≥ 35 dB	≥ 28 dB
08S30R-MSOTS3	male		4 GHz to 26.5 GHz	$\leq 5.0^\circ$	$\leq 5.0^\circ$	≥ 25 dB	≥ 21 dB
			26.5 GHz to 50 GHz	$\leq 7.0^\circ$	$\leq 7.0^\circ$	≥ 22 dB	≥ 20 dB
			50 GHz to 70 GHz	$\leq 10.0^\circ$	$\leq 10.0^\circ$	≥ 20 dB	≥ 17 dB
P9K30R-MSOTD3	female	RPC-1.35	DC to 90 GHz	These calibration kits are defined with "data based definitions" for the calibration standards and specified with "residual system data" for the calibration kits in the related technical data sheets.			
P9S30R-MSOTD3	male						



75 Ω Impedance

Rosenberger No.	Gender	Interface	Frequency Range	Open Deviation from nominal phase	Short Deviation from nominal phase	Load Return Loss	Thru Return Loss
P5K30R-MSOTS3	female	RPC-N 75 Ω	DC to 4 GHz	$\leq 3.0^\circ$	$\leq 2.5^\circ$	≥ 38 dB	≥ 36 dB
P5S30R-MSOTS3	male		4 GHz to 8 GHz	$\leq 5.0^\circ$	$\leq 4.0^\circ$	≥ 32 dB	≥ 27 dB
			8 GHz to 12 GHz	$\leq 6.0^\circ$	$\leq 5.0^\circ$	≥ 30 dB	≥ 25 dB

MSO (3-in-1) Compact Calibration Kits

50 Ω Impedance

Rosenberger No.	Gender	Interface	Frequency Range	Open Deviation from nominal phase	Short Deviation from nominal phase	Load Return Loss
60K34R-MSON3	female	7-16	DC to 2.5 GHz 2.5 GHz to 4 GHz	$\leq 3.0^\circ$	$\leq 3.0^\circ$	≥ 40 dB ≥ 38 dB
60S34R-MSON3	male					
60K36R-MSON3	female	7-16	DC to 2.5 GHz 2.5 GHz to 6 GHz	$\leq 3.0^\circ$	$\leq 3.0^\circ$	≥ 40 dB ≥ 38 dB
60S36R-MSON3	male					
64K36R-MSOS3	female	4.3-10	DC to 2.5 GHz 2.5 GHz to 6 GHz	$\leq 2.0^\circ$	$\leq 2.0^\circ$	≥ 40 dB ≥ 38 dB
64S36R-MSOS3	male					
65K36R-MSOS3	female	4.1-9.5	DC to 2.5 GHz 2.5 GHz to 6 GHz	$\leq 3.0^\circ$	$\leq 2.0^\circ$	≥ 40 dB ≥ 38 dB
65S36R-MSOS3	male					
53K36R-MSON3	female	N	DC to 2.5 GHz 2.5 GHz to 6 GHz	$\leq 3.0^\circ$	$\leq 2.0^\circ$	≥ 40 dB ≥ 38 dB
53S36R-MSON3	male					
53K38R-MSON3	female	N	DC to 2.5 GHz 2.5 GHz to 6 GHz 6 GHz to 8 GHz	$\leq 3.0^\circ$	$\leq 2.0^\circ$	≥ 42 dB
53S38R-MSON3	male			$\leq 3.0^\circ$	$\leq 2.0^\circ$	≥ 38 dB
				$\leq 5.0^\circ$	$\leq 4.0^\circ$	≥ 35 dB
05K30R-MSOS3	female	RPC-N	DC to 6 GHz 6 GHz to 9 GHz 9 GHz to 18 GHz	$\leq 2.0^\circ$	$\leq 1.5^\circ$	≥ 42 dB
05S30R-MSOS3	male			$\leq 3.0^\circ$	$\leq 2.0^\circ$	≥ 36 dB
				$\leq 3.0^\circ$	$\leq 2.5^\circ$	≥ 30 dB
03K30R-MSOS3	female	RPC-3.50	DC to 4 GHz 4 GHz to 8 GHz 8 GHz to 26.5 GHz	$\leq 1.0^\circ$	$\leq 1.0^\circ$	≥ 40 dB
03S30R-MSOS3	male			$\leq 2.0^\circ$	$\leq 2.0^\circ$	≥ 35 dB
				$\leq 3.0^\circ$	$\leq 3.0^\circ$	≥ 30 dB
02K30R-MSOS3	female	RPC-2.92	DC to 4 GHz 4 GHz to 26.5 GHz 26.5 GHz to 40 GHz	$\leq 1.5^\circ$	$\leq 1.5^\circ$	≥ 40 dB
02S30R-MSOS3	male			$\leq 4.0^\circ$	$\leq 4.0^\circ$	≥ 28 dB
				$\leq 5.0^\circ$	$\leq 5.0^\circ$	≥ 25 dB
02K34R-MSOS3	female	RPC-2.92	DC to 4 GHz 4 GHz to 26.5 GHz 26.5 GHz to 43.5 GHz	$\leq 1.5^\circ$	$\leq 1.5^\circ$	≥ 40 dB
02S34R-MSOS3	male			$\leq 4.0^\circ$	$\leq 4.0^\circ$	≥ 28 dB
				$\leq 5.0^\circ$	$\leq 5.0^\circ$	≥ 25 dB
09K30R-MSOS3	female	RPC-2.40	DC to 4 GHz 4 GHz to 26.5 GHz 26.5 GHz to 50 GHz	$\leq 2.0^\circ$	$\leq 1.5^\circ$	≥ 36 dB
09S30R-MSOS3	male			$\leq 4.0^\circ$	$\leq 3.0^\circ$	≥ 30 dB
				$\leq 6.0^\circ$	$\leq 4.5^\circ$	≥ 22 dB
08K30R-MSOS3	female	RPC-1.85	DC to 4 GHz 4 GHz to 26.5 GHz 26.5 GHz to 50 GHz 50 GHz to 70 GHz	$\leq 2.0^\circ$	$\leq 2.0^\circ$	≥ 35 dB
08S30R-MSOS3	male			$\leq 5.0^\circ$	$\leq 5.0^\circ$	≥ 25 dB
				$\leq 7.0^\circ$	$\leq 7.0^\circ$	≥ 22 dB
				$\leq 10.0^\circ$	$\leq 10.0^\circ$	≥ 20 dB
P9K30R-MSOD3	female	RPC-1.35	DC to 90 GHz	These calibration kits are defined with "data based definitions" for the calibration standards and specified with "residual system data" for the calibration kits in the related technical data sheets.		
P9S30R-MSOD3	male					

75 Ω Impedance

Rosenberger No.	Gender	Interface	Frequency Range	Open Deviation from nominal phase	Short Deviation from nominal phase	Load Return Loss
P5K30R-MSOS3	female	RPC-N 75 Ω	DC to 4 GHz 4 GHz to 8 GHz 8 GHz to 12 GHz	$\leq 3.0^\circ$	$\leq 2.5^\circ$	≥ 38 dB
P5S30R-MSOS3	male			$\leq 5.0^\circ$	$\leq 4.0^\circ$	≥ 32 dB
				$\leq 6.0^\circ$	$\leq 5.0^\circ$	≥ 30 dB



Test, Measurement & Calibration

For further information refer to our website:
<http://www.rosenberger.com/calibration-kits>

Rosenberger

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