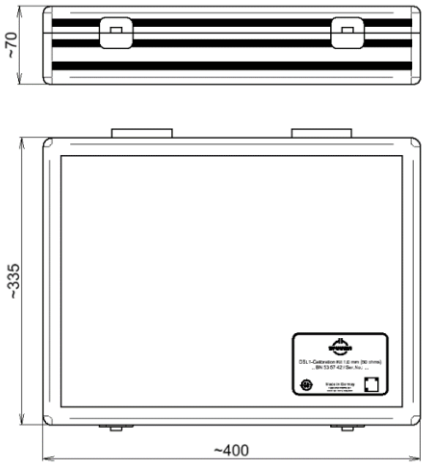
Calibration Kit OSLT; boxed, 0.8 mm | BN 530850

A photo of the product
is to be placed here.



all dimensions in millimeter

Radio frequency characteristics

Interface type		0.8 mm metrology grade per IEEE Std 287
Frequency range		DC to 150 GHz
Characteristic impedance		50 Ω
Repeatability, min.		45 dB
THROUGH	Return loss, min.	27 dB @ DC to 10 GHz 24 dB @ 10 to 26.5 GHz 21 dB @ 26.5 to 50 GHz 18 dB @ 50 to 70 GHz 15 dB @ 70 to 90 GHz 12 dB @ 90 to 120 GHz 9 dB @ 120 to 150 GHz
	Insertion loss, max.	0.7 dB
OPEN	Reflection phase accuracy, max.	2.5 deg @ DC to 40 GHz 4.0 deg @ 40 to 90 GHz 5.5 deg @ 90 to 120 GHz 7.0 deg @ 120 to 150 GHz
	Offset length	see calibration data
SHORT	Reflection phase accuracy, max.	2.5 deg @ DC to 40 GHz 3.5 deg @ 40 to 90 GHz 4.5 deg @ 90 to 120 GHz 5.5 deg @ 120 to 150 GHz
	Offset length	see calibration data
	Offset length, nom.	3.890 mm
LOAD	DC resistance	50 Ω ± 0.5 Ω
	Return loss, min.	31 dB @ DC to 10 GHz 25 dB @ 10 to 26.5 GHz 22 dB @ 26.5 to 70 GHz 17 dB @ 70 to 150 GHz
	Average power rating	50 mW

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Mechanical characteristics

Inner conductor material / surface coating	CuBe age hardened / gold-plated
Outer conductor material / surface coating	CuBe / gold-plated copper alloy / gold-plated
Dielectric material	PS
Other parts material / surface coating	copper alloy / gold plated CuBe / CuSnZn-plated
Weight, approx.	2 kg
Marking	laser engraving

Environmental conditions

Operation	
Ambient temperature range	+18 to +28°C
Relative humidity, max.	95% (non-condensing)
Storage	
Ambient temperature range	-40 to +70°C
Relative humidity, max.	95% (non-condensing)

Scope of delivery

Description	Qty per kit	Part No	Calibration Option
Open circuit termination, 0.8 mm plug	1	BN 530831	Factory calibration
Open circuit termination, 0.8 mm socket	1	BN 530832	Factory calibration
Short circuit termination, 0.8 mm plug	1	BN 530833	Factory calibration
Short circuit termination, 0.8 mm socket	1	BN 530836	Factory calibration
Matched load, 0.8 mm plug	1	BN 530839	Factory calibration
Matched load, 0.8 mm socket	1	BN 530840	Factory calibration
Through, 0.8 mm plug / plug	1	BN 530841	Factory calibration
Through, 0.8 mm socket / socket	1	BN 530842	Factory calibration
Through, 0.8 mm plug / socket	1	BN 530843	Factory calibration
Torque wrench 6 mm / 45 N·cm	1	BN 238748C0001	Factory calibration
Torque wrench 6 mm / 34 N·cm	1	BN 238749C0001	Factory calibration
Double open-ended spanner 7 mm	1	BN 238750	
Certificate of calibration incl. calibration data			
USB flash drive including certificate of calibration incl. calibration data data sheet product manual calibration kit handling instruction torque wrench		 Doc.No. 10093407 Doc.No. 10093494	
Aluminium storage case			

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Accessories

Connector gauge for 0.8 mm plug mating face	BN 530815
Connector gauge for 0.8 mm socket mating face	BN 530816
Standards and adapters for extended frequency range (165 GHz)	
Short circuit termination, 0.8 mm plug, offset length, nom.: 4.554 mm	BN 530834
Short circuit termination, 0.8 mm plug, offset length, nom.: 5.179 mm	BN 530835
Short circuit termination, 0.8 mm socket, offset length, nom.: 4.554 mm	BN 530837
Short circuit termination, 0.8 mm socket, offset length, nom.: 5.179 mm	BN 530838
Adapter precision, R1.4k to 0.8 mm plug	BN 533193
Adapter precision, R1.4k to 0.8 mm socket	BN 533192

Calibration data

Calibration data in formats for the common VNAs are included in the kit. It includes individual calibration coefficients for every kit to achieve the best possible performance.
The specifications for opens and shorts are given as allowed deviation from the nominal model.

Re-calibration

The suggested interval for recalibration is 12 months or 500 matings, whichever comes first. The actual need for recalibration depends on the use and the maintenance of the kit. The recalibration interval should begin with the day of initial use after recalibration.

Pin depth limits

Pin depth is the distance between outer conductor mating plane and inner conductor mating plane. Positive values stand for recession of the inner conductor, negative values for protrusion.

Interface type	Specified pin depth	Measurement error, max.
0.8 mm	3 to 20 µm	3 µm