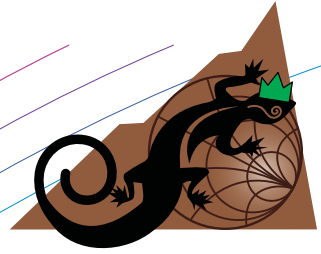


CALIBRATION KIT

N1.1

DATA SHEET



COPPER MOUNTAIN
TECHNOLOGIES

- ▶ Frequency range: DC to 1.5 GHz
- ▶ Type N 50 Ohm
- ▶ Male & Female
- ▶ Full 2-Ports calibration capability



Copper Mountain Technologies

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- Type N 50 Ohm
- DC - 1500 MHz
- Male & Female
- Full 2 - Port calibration capability

The Planar N1.1 type N calibration kit is used to calibrate vector network analyzers up to 1.5 GHz for measurements of components with 50 Ω type N connectors.

CALIBRATION KIT INCLUDES:

Calibration Standard	Model No	Freq Range (GHz)	Return Loss (dB)	Phase Accuracy
Short/Open Male 	CS0501NM.1	DC – 1.5	< 0.10	$\pm 1.5^\circ$ Open $\pm 1.0^\circ$ Short
Load Male 	CL501NM.1	DC – 1.5	≥ 36.0	-
Open Female 	C0501NF.1	DC – 1.5	< 0.10	$\pm 1.5^\circ$
Short Female 	CS506NF.1	DC – 6.0	< 0.10	$\pm 1.0^\circ$ (DC-1.5 GHz)
Thru Female-Female 	P501NFF.1	DC – 1.5	≥ 36.0	-

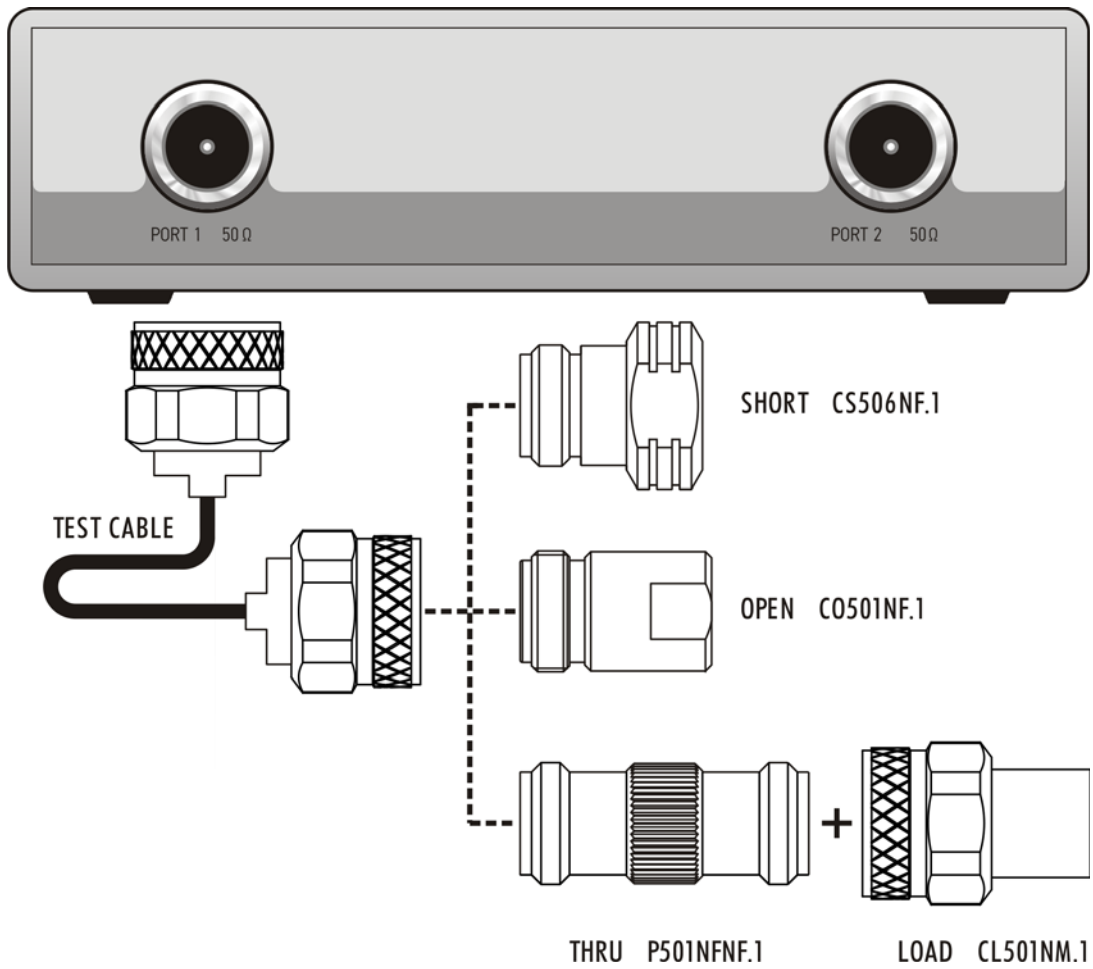


Fig. 1 Full 1-Port Calibration for Male Test Port.

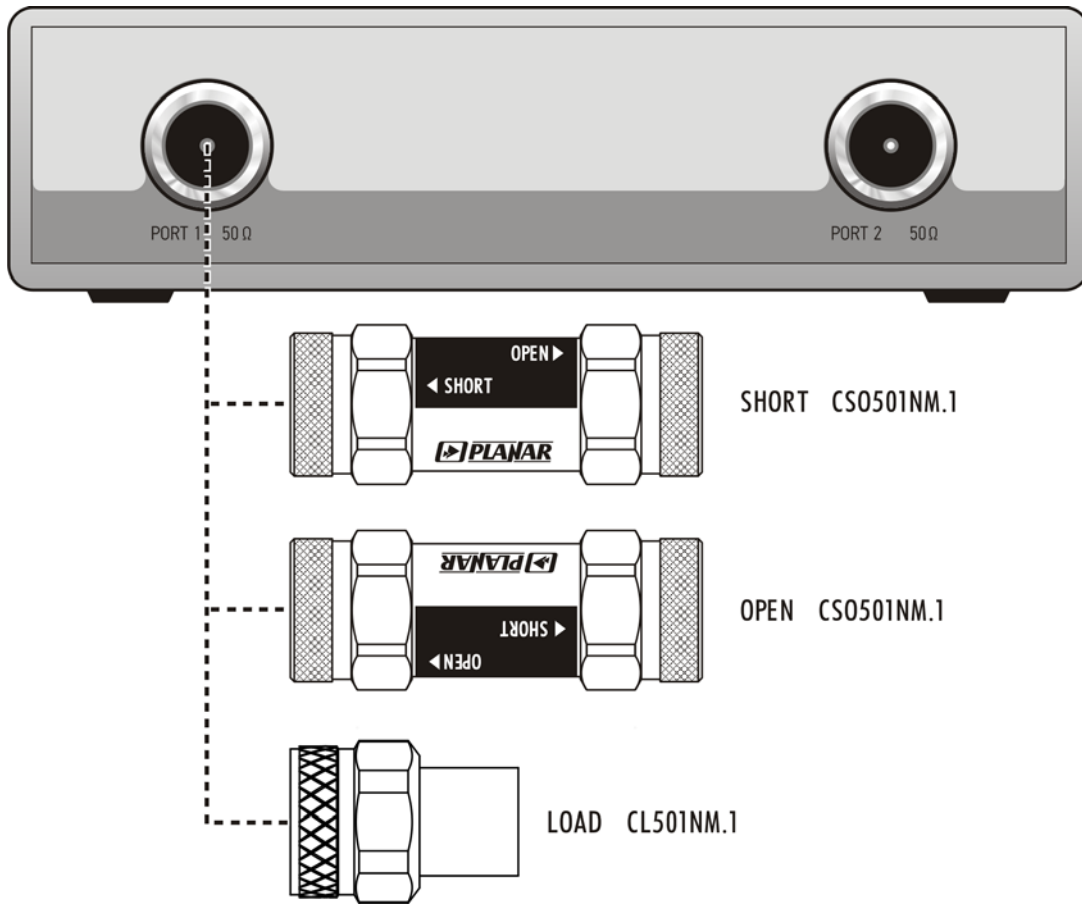


Fig. 2 Full 1-Port Calibration for Female Test Port.

STANDARD DEFINITIONS

Standard	Constants						
Open	$C0 \times 10^{-15}$ F	$C1 \times 10^{-27}$ F/Hz	$C2 \times 10^{-36}$ F/Hz ²	$C3 \times 10^{-45}$ F / Hz ³	Offset Delay	Offset Loss	Offset Z0
Male	62.14	-143.07	82.92	0.76	17.4 ps	700 MΩ/s	50 Ω
Female	119.1	-37.0	26.3	5.5	-13.68 ps	700 MΩ/s	50 Ω

Standard	Constants						
Short	L0	L1	L2	L3	Offset Delay	Offset Loss	Offset Loss
Male	-	-	-	-	17.82 ps	700 MΩ/s	50 Ω
Female	-	-	-	-	0.093 ps	700 MΩ/s	50 Ω

Standard	Return Loss	Constants		
		Offset Loss	Electrical Delay	Offset Z0
Thru				
Female- Female	≥ 36 dB	700 MΩ/s	83.0 ps	50 Ω

Standard	Return Loss	Constants
Load		Offset Z0
Female	≥ 36 dB	50 Ω

For a complete listing of our global sales network,
please visit www.coppermountaintech.com/sales/

