

# N1.1 Calibration Kit

The 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.

## Electrical Data

<b>Impedance</b>	50Ω
<b>Frequency range</b>	DC to 1.5 GHz

## Electrical Specifications\*

<b>Load</b>	DC - 1.5 GHz
<b>Return loss</b>	≥ 36 dB

<b>Open</b>	DC - 1.5 GHz
<b>Phase Deviation</b>	± 1.5°

<b>Short</b>	DC - 1.5 GHz
<b>Phase Deviation</b>	± 1.0°

<b>Thru</b>	DC - 1.5 GHz
<b>Offset Loss</b>	700 MΩ/s
<b>Electrical Delay</b>	83.0 ps
<b>Return Loss</b>	> 36 dB

## Environmental Data

<b>Operating temperature</b>	15°C to 35°C
<b>Storage temperature</b>	-40°C to +75°C

\*Phase deviation: relative tolerance from standard phase



## Coefficients

	Female	Male
<b>Open</b>	$C_0 = 62.14 \times 10^{-15} \text{ F}$	$C_0 = 119.1 \times 10^{-15} \text{ F}$
	$C_1 = -143.07 \times 10^{-27} \text{ F/Hz}$	$C_1 = -37.0 \times 10^{-27} \text{ F/Hz}$
	$C_2 = 82.92 \times 10^{-36} \text{ F/Hz}^2$	$C_2 = 26.3 \times 10^{-36} \text{ F/Hz}^2$
	$C_3 = 0.76 \times 10^{-45} \text{ F/Hz}^3$	$C_3 = 5.5 \times 10^{-45} \text{ F/Hz}^3$
Offset delay	17.4 ps	-13.68 ps
Offset loss	700 MΩ/s	700 MΩ/s
<b>Short</b>		
	Offset delay	17.82 ps

