Mechanical Calibration Kits



Product Overview

Calibration kits of China Electronics Technology Instruments, including opens, shorts, loads and adapters, are test accessories of vector network analyzers (VNA). Specifications of a VNA after calibration are determined by calibration kits, therefore the requirement of kits specifications are very high. They should also deliver good stability and repeatability.

- Multiple types, covering various coaxial, waveguide calibration kits
- High calibration precision
- Good repeatability

Technical Specifications

Coaxial Calibration Kits

Model	Description	Frequency Range(GHz)	Specifications	Configuration List
AV31101 Type N 50Ω Calibration Kit	Coaxial Calibration Kit	DC～18GHz	Open: ± 1.5° Short: ± 1.5° Broadband Load: VSWR＜1.055 Adapter: VSWR＜1.083	Type N(m) Open 1 Type N(m) Open 1 Type N(m) Short 1 Type N(m) Short 1 Type N(f)-Load 1 Type N(m) Load 1 N(f)-N(f) Adapter 1 N(m)-N(m) Adapter 1 7mm-N(m) Adapter 2 7mm-N(f) Adapter 2 Type N Torque Wrench 1 Hook Spanner 1
AV31101A Type N 50Ω T(m) Shape Calibration Kit	Coaxial Calibration Kit	DC～18GHz	Open: ± 1.5° Short: ± 1.0° Broadband Load: VSWR＜1.055	Type N(m) 50Ω T Shape Calibration Kit
AV31101B Type N(f) 50Ω T Shape Calibration Kit	Coaxial Calibration Kit	DC～18GHz	Open: ± 1.5° Short: ± 1.0° Broadband Load: VSWR＜1.055	Type N(f) 50Ω T Shape Calibration Kit

AV20204 Type N 75Ω Calibration Kit	Coaxial Calibration Kit	DC～3GHz	Open: ± 1.6° Short: ± 1.2° Broadband Load: VSWR＜ 1.04 75Ω Adapter: VSWR＜1.04	Type N(m) 75Ω-Open 1 Type N(m) 75Ω Short 1 Type N(f) 75Ω Open 1 Type N(f) 75Ω-Short 1 Type N(f) 75Ω-Load 1 Type N(m) 75Ω-Load 1 N75(f)-N75(f) Adapter 1 N75(m)-N75(m) Adapter 1 N75(m)-N75(f) Adapter 1 N50(f)-N75(m) Adapter 2 Option N50(m)-N75(m) Adapter 2 Option N50(m)-N75(f) Adapter 2 Option N50(f)-N75(f) Adapter 2 Option Type N Torque Wrench 1
AV20205 Type N 50Ω Calibration Kit	Coaxial Calibration Kit	DC～3GHz	Open: ± 0.85° Short: ± 0.65° Broadband Load: VSWR＜ 1.014 Adapter: VSWR＜1.029	Type N(m) Open 1 Type N(m) Open 1 Type N(m) Short 1 Type N(m) Short 1 Type N(f)-Load 1 Type N(m) Load 1 N(f)-N(f) Adapter 1 N(m)-N(m) Adapter 1 N(m)-N(f) Adapter 1 Type N Torque Wrench 1
AV20207 Type N(m) 50Ω T Shape Calibration Kit	Coaxial Calibration Kit	DC～3GHz	Open: ± 0.85° Short:± 0.65° Broadband Load: VSWR＜ 1.014	Type N(m) 50Ω T Shape Calibration Kit
AV20207A Type N(f) 50Ω T Shape Calibration Kit	Coaxial Calibration Kit	DC～3GHz	Open: ± 0.85° Short: ± 0.65° Broadband Load: VSWR＜ 1.014	Type N(f) 50Ω T Shape Calibration Kit

(To be continued)

Model.	Description	Frequency Range(GHz)	Specifications	Configuration List
AV31104 Type N 50Ω Calibration Kit	Coaxial Calibration Kit	DC～6GHz	Open: ± 1.0° Short: ± 1.0° Broadband Load: VSWR＜1.023 Adapter: VSWR＜1.029	Type N(m) Open 1 Type N(m) Open 1 Type N(m) Short 1 Type N(m) Short 1 Type N(f)-Load 1 Type N(m) Load 1 N(f)-N(f) Adapter 1 N(m)-N(m) Adapter 1 N(m)-N(f) Adapter 1 Type N Torque Wrench 1
AV20201 Type N Economical Calibration Kit	Coaxial Calibration Kit	DC～9GHz	Open: ± 1.2° Short: ± 1.0° Broadband Load: VSWR＜1.029 Adapter: VSWR＜1.052	Type N(m) Open 1 Type N(m) Open 1 Type N(m) Short 1 Type N(m) Short 1 Type N(f)-Load 1 Type N(m) Load 1 N(f)-N(f) Adapter 1 N(m)-N(m) Adapter 1 N(m)-N(f) Adapter 1 Type N Torque Wrench 1
Av20201A Type N(m) Economical Calibration Kit	Coaxial Calibration Kit	DC～9GHz	Open: ± 1.2° Short :± 1.0° Broadband Load: VSWR＜1.029	Type N(m) 50Ω T Shape Calibration Kit
AV20201B Type N(f) Economical Calibration Kit	Coaxial Calibration Kit	DC～9GHz	Open: ± 1.2° Short: ± 1.0° Broadband Load: VSWR＜1.029	Type N(f) 50Ω T Shape Calibration Kit
AV31111 7mm Calibration Kit	Coaxial Calibration Kit	DC～18GHz	Open:± 0.5° Short: ± 0.5° Broadband Load: VSWR＜1.04	7mm Open 1 7mm Short 1 7mm Load 1 Type N Torque Wrench 1

AV31121 3.5mm Calibration Kit	Coaxial Calibration Kit	DC～ 26.5GHz	Open: ± 1.5° Short: ± 1.5° Broadband Load: VSWR＜ 1.055 Adapter: VSWR＜1.106	3.5mm(m) Open 1 3.5mm(m) Open 1 3.5mm(m) Short 1 3.5mm(m) Short 1 3.5mm(f)-Load 1 3.5mm(m) Load 1 3.5mm(f)-3.5mm(f) Adapter 1 3.5mm(m)-3.5mm(m) Adapter 1 3.5mm(m)-3.5mm(f) Adapter 1 3.5mm Torque Wrench 1
AV31121A 3.5mm Calibration Kit	Coaxial Calibration Kit	DC～6GHz	Open: ± 0.85° Short: ± 0.55° Broadband Load: VSWR＜ 1.029 Adapter: VSWR＜1.04	3.5mm(m) Open 1 3.5mm(m) Open 1 3.5mm(m) Short 1 3.5mm(m) Short 1 3.5mm(f)-Load 1 3.5mm(m) Load 1 3.5mm(f)-3.5mm(f) Adapter 1 3.5mm(m)-3.5mm(m) Adapter 1 3.5mm(m)-3.5mm(f) Adapter 1
AV20202 3.5mm Calibration Kit	Coaxial Calibration Kit	DC～9GHz	Open:± 1.0° Short: ± 0.85° Broadband Load: VSWR＜ 1.029 Adapter: VSWR＜1.052	3.5mm(m) Open 1 3.5mm(m) Open 1 3.5mm(m) Short 1 3.5mm(m) Short 1 3.5mm(f)-Load 1 3.5mm(m) Load 1 3.5mm(f)-3.5mm(f) Adapter 1 3.5mm(m)-3.5mm(m) Adapter 1 3.5mm(m)-3.5mm(f) Adapter 1 N(m)-3.5mm(m) Adapter 1 N(m)-3.5mm(f) Adapter 1 N(f)-3.5mm(m) Adapter 1 N(f)-3.5mm(f) Adapter 1 3.5mm Torque Wrench 1

AV31123 2.4mm Calibration Kit	Coaxial Calibration Kit	DC～40GHz	Open: ± 1.5° Short:± 1.5° Broadband Load: VSWR＜1.105 Adapter: VSWR＜1.119	2.4mm(m) Open 1 2.4mm(m) Open 1 2.4mm(m) Short 1 2.4mm(m) Short 1 2.4mm(f)-Load 1 2.4mm(m)-Load 1 2.4mm(f)- 2.4mm(f) Adapter 1 2.4mm(m)- 2.4mm(m) Adapter1 2.4mm(m)- 2.4mm(f) Adapter 1 3.5mm Torque Wrench 1
AV31123A 2.4mm Calibration Kit	Coaxial Calibration Kit	DC～50GHz	Open:± 2.25° Short: ± 2° Broadband Load: VSWR＜1.106 Adapter: VSWR＜1.222	2.4mm(m) Open 1 2.4mm(m) Open 1 2.4mm(m) Short 1 2.4mm(m) Short 1 2.4mm(f)-Load 1 2.4mm(m) Load 1 2.4mm(f)- 2.4mm(f) Adapter 1 2.4mm(m)- 2.4mm(m) Adapter 1 2.4mm(m)- 2.4mm(f) Adapter 1 3.5mm Torque Wrench 1
AV31128 1.85mm Calibration Kit	Coaxial Calibration Kit	DC～67GHz	Open : ± 2.0° Short : ± 2.0° Broadband Load: VSWR＜1.15 Adapter: VSWR＜1.25	1.85mm(m) Open 1 1.85mm(f) Open 1 1.85mm(m) Short 1 1.85mm(f) Short 1 1.85mm(f) Load 1 1.85mm(m) Load 1 1.85mm(f)-1.85mm(f) Adapter 1 1.85mm(m)-1.85mm(m) Adapter 1 1.85mm(m)-1.85mm(f) Adapter 1 3.5mm Torque Wrench 1

Note: The specifications of opens-and shorts are the range of difference between tested phase value and nominal phase value.

Waveguide Calibration Kits

Model	Description	Frequency range(GHz)	Specifications	Configuration List

AV32112	Waveguide Calibration Kit	2.6～3.95	Fixed Load: VSWR＜1.03 Waveguide-Coaxial Adapter: VSWR＜1.15	Short Circuit 2 1/4λ_g Offset Plate 2 Fixed Load 2 WR284-7mmWaveguide-Coaxial Adapter 2
AV32113	Waveguide Calibration Kit	3.94～6	Fixed Load: VSWR＜1.03 Waveguide-Coaxial Adapter: VSWR＜1.15	Short Circuit 2 1/4λ_g Offset Plate 2 Fixed Load 2 WR187-7mm Waveguide-Coaxial Adapter 2
AV32151	Waveguide Calibration Kit	3.94～6	Fixed Load: VSWR＜1.03 Waveguide-Coaxial Adapter: VSWR＜1.15	Short Circuit 2 1/8λ_gOffset Plate 1 3/8λ_gOffset Plate 1 Fixed Load 2 WR187-N Male Waveguide-Coaxial Adapter 1 WR187-N Female Waveguide-Coaxial Adapter 1
AV32114	Waveguide Calibration Kit	4.64～7.05	Fixed load: VSWR＜1.03 Waveguide-Coaxial Adapter: VSWR＜1.20	Short Circuit 2 1/4λ_g Offset Plate 2 Fixed Load 2 WR159-7mm Waveguide-Coaxial Adapter 2
AV32115	Waveguide Calibration Kit	5.88～8.17	Fixed Load: VSWR＜1.03 Waveguide-Coaxial Adapter: VSWR＜1.20	Short Circuit 2 1/4λ_g Offset Plate 2 Fixed Load 2 WR137-7mm Waveguide-Coaxial Adapter 2
AV32116	Waveguide Calibration Kit	7～10	Fixed load: VSWR＜1.03 Waveguide-Coaxial Adapter: VSWR＜1.20	Short Circuit 2 1/4λ_g Offset Plate 2 Fixed Load 2 WR112-7mmwaveguide-Coaxial Adapter 2

AV32117	Waveguide Calibration Kit	8～12	Fixed Load: VSWR＜1.03 Waveguide-Coaxial Adapter: VSWR＜1.20	Short Circuit 2 1/4λ_g Offset Plate 2 Fixed Load 2 WR90-7mm Waveguide-Coaxial Adapter 2
AV32152	Waveguide Calibration Kit	9～10	Fixed Load: VSWR＜1.03 Waveguide-Coaxial Adapter: VSWR＜1.20	Short Circuit 2 1/8λ_g Offset Plate 1 3/8λ_gOffset Plate 1 Fixed Load 2 WR90-N Male Waveguide-Coaxial Adapter 1 WR90-N Female Waveguide-Coaxial Adapter 1
AV32154	Waveguide Calibration Kit	10～15	Fixed Load: VSWR＜1.03 Waveguide-Coaxial Adapter: VSWR＜1.20	Short Circuit 2 1/4λ_g Offset Plate 2 Fixed Load 2 WR75-7mm Waveguide-Coaxial Adapter 2
AV32118	Waveguide Calibration Kit	12～18	Fixed Load: VSWR＜1.03 Waveguide-Coaxial Adapter: VSWR＜1.20	Short Circuit 2 1/4λ_g Offset Plate 2 Fixed Load 2 WR62-7mm Waveguide-Coaxial Adapter 2
AV32119	Waveguide Calibration Kit	18～26.5	Fixed Load: VSWR＜1.03 Waveguide-Coaxial Adapter: VSWR＜1.20	Short Circuit 2 1/4λ_g Offset Plate 2 Fixed Load 2 WR42-7mm Waveguide-Coaxial Adapter 2
AV32101 8mm Waveguide Calibration Kit	Waveguide Calibration Kit	26.5～40	Fixed Load: VSWR＜1.032 Sliding Load: VSWR＜1.032	Short Circuit 2 1/4λ_gOffset Plate 2 Straight Waveguide 2 Fixed Load 1 Sliding Load 1

AV32157 7mm Waveguide Calibration Kit	Waveguide Calibration Kit	33～50	Fixed Load: VSWR＜1.06 Sliding Load: VSWR＜1.06	Short Circuit 2 1/4λ_gOffset Plate 2 Straight Waveguide 2 Fixed Load 1 Sliding Load 1
AV32156 5mm Waveguide Calibration Kit	Waveguide Calibration Kit	50～75	Fixed Load: VSWR＜1.06 Sliding Load: VSWR＜1.06	Short Circuit 1 1/4λ_gOffset Plate 1 Straight Waveguide 2 Fixed Load 1 Sliding Load 1
AV32141 3mm Waveguide Calibration Kit	Waveguide Calibration Kit	75～110	Fixed Load: VSWR＜1.065 Sliding Load: VSWR＜ 1.065	Short Circuit 1 1/4λ_gOffset Plate 1 Straight Waveguide 2 Fixed Load 1 Sliding Load 1
AV32155 2mm Waveguide Calibration Kit	Waveguide Calibration Kit	110～170	Fixed Load: VSWR＜1.06 Sliding Load: VSWR＜1.06	Short Circuit 1 1/4λ_gOffset Plate 1 Straight Waveguide 2 Fixed Load 1 Sliding Load 1
AV20301 1mm Waveguide Calibration Kit	Waveguide Calibration Kit	170～220	Fixed Load: VSWR＜1.085	Short Circuit 2 Offset Plate 2 Fixed Load 2 Straight Waveguide 2
AV20302 1mm Waveguide Calibration Kit	Waveguide Calibration Kit	220～325	Fixed Load: VSWR＜1.10	Short circuit 2 Offset Plate 2 Fixed Load 2 Straight Waveguide 2
AV20301T 0.5THz Waveguide Calibration Kit	Waveguide Calibration Kit	325～500	Fixed Load: VSWR＜1.12	Short Circuit 2 Offset Plate 2 Fixed Load 2 Straight Waveguide 2