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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: $\pm 1.5^\circ$ Short: $\pm 1.5^\circ$ 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: $\pm 1.5^\circ$ Short: $\pm 1.0^\circ$ 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: $\pm 1.5^\circ$ Short: $\pm 1.0^\circ$ 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

<p>AV31121 3.5mm Calibration Kit</p>	<p>Coaxial Calibration Kit</p>	<p>DC~ 26.5GHz</p>	<p>Open: $\pm 1.5^\circ$ Short: $\pm 1.5^\circ$ Broadband Load: VSWR < 1.055 Adapter: VSWR < 1.106</p>	<p>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</p>
<p>AV31121A 3.5mm Calibration Kit</p>	<p>Coaxial Calibration Kit</p>	<p>DC~6GHz</p>	<p>Open: $\pm 0.85^\circ$ Short: $\pm 0.55^\circ$ Broadband Load: VSWR < 1.029 Adapter: VSWR < 1.04</p>	<p>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</p>
<p>AV20202 3.5mm Calibration Kit</p>	<p>Coaxial Calibration Kit</p>	<p>DC~9GHz</p>	<p>Open: $\pm 1.0^\circ$ Short: $\pm 0.85^\circ$ Broadband Load: VSWR < 1.029 Adapter: VSWR < 1.052</p>	<p>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</p>

AV31123 2.4mm Coaxial Calibration Kit	Coaxial Calibration Kit	DC~40GHz	Open: $\pm 1.5^\circ$ Short: $\pm 1.5^\circ$ 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) Adapter 1 2.4mm(m)- 2.4mm(f) Adapter 1 3.5mm Torque Wrench 1
AV31123A 2.4mm Coaxial Calibration Kit	Coaxial Calibration Kit	DC~50GHz	Open: $\pm 2.25^\circ$ Short: $\pm 2^\circ$ 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 Coaxial Calibration Kit	Coaxial Calibration Kit	DC~67GHz	Open : $\pm 2.0^\circ$ Short : $\pm 2.0^\circ$ 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
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AV32112	Waveguide Calibration Kit	2.6~3.95	Fixed Load: VSWR<1.03 Waveguide-Coaxial Adapter: VSWR<1.15	Short Circuit 2 1/4 λ_g Offset Plate 2 Fixed Load 2 WR284-7mm Waveguide-Coaxial Adapter 2
AV32113	Waveguide Calibration Kit	3.94~6	Fixed Load: VSWR<1.03 Waveguide-Coaxial Adapter: VSWR<1.15	Short Circuit 2 1/4 λ_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 1/8 λ_g Offset Plate 1 3/8 λ_g Offset 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 1/4 λ_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 1/4 λ_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 1/4 λ_g Offset Plate 2 Fixed Load 2 WR112-7mm waveguide-Coaxial Adapter 2

AV32117	Waveguide Calibration Kit	8~12	Fixed Load: VSWR < 1.03 Waveguide-Coaxial Adapter: VSWR < 1.20	Short Circuit 2 1/4 λ_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 1/8 λ_g Offset Plate 1 3/8 λ_g Offset 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 1/4 λ_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 1/4 λ_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 1/4 λ_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 1/4 λ_g Offset 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 _g Offset 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 _g Offset 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 _g Offset 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 _g Offset 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