

202XX/311XX Series Coaxial Calibration Kits

Key features:

- ◆ Series coaxial ports
- ◆ Frequency range DC~120 GHz
- ◆ Cost-effective
- ◆ Load calibration



Product description:

The calibration kit is a test accessory for vector network analyzers, which can greatly improve the test accuracy of vector network analyzers. Coaxial calibration kits include 1 USB flash drive (with calibration data).

General specifications:

1. Performance Parameters (temperature: 23±3 °C)

Model	Name	Frequency Range	Electrical Specifications	Configuration List
20204	Coaxial calibration kits	DC to 3GHz	Open : ±1.6° Short : ±1.2° Load: VSWR<1.04 75Ω adapter: VSWR<1.05	N-type 75Ω male open (1 piece) N-type 75Ω male short (1 piece) N-type 75Ω female open (1 piece) N-type 75Ω female short (1 piece) N-type 75Ω female load (1 piece) N-type 75Ω male load (1 piece) N75(f)-N75(f) adapter (1 piece) N75(m)-N75(m) adapter (1 piece) N75(m)-N75(f) adapter (1 piece) N50(f)-N75(m) adapter (1 option) N50(m)-N75(m) adapter (1 option) N50(m)-N75(f) adapter (1 option) N50(f)-N75(f) adapter (1 option) N-type torque wrench (1 piece)

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20205	Coaxial calibration kits	DC to 3GHz	Open :±0.85° Short :±0.65° Load: VSWR<1.015 Adapter: VSWR<1.029	N-type male open (1 piece) N-type female open (1 piece) N-type male short (1 piece) N-type female short (1 piece) N-type female load (1 piece) N-type male load (1 piece) N(f)-N(f) adapter (1 piece) N(m)-N(m) adapter (1 piece) N(m)-N(f) adapter (1 piece) N-type torque wrench (1 piece)
20207	Coaxial calibration kits	DC to 3GHz	Open :±0.85° Short :±0.65° Load: VSWR<1.015	N-type 50Ω T-type male calibration kit
20207A	Coaxial calibration kits	DC to 3GHz	Open :±0.85° Short :±0.65° Load: VSWR<1.015	N-type 50Ω T-type female calibration kit
31104	Coaxial calibration kits	DC to 6GHz	Open :±1.5° Short :±1.0° Load: VSWR<1.023 Adapter: VSWR<1.029	N-type male open (1 piece) N-type female open (1 piece) N-type male short (1 piece) N-type female short (1 piece) N-type female load (1 piece) N-type male load (1 piece) N(f)-N(f) adapter (1 piece) N(m)-N(m) adapter (1 piece) N(m)-N(f) adapter (1 piece) N-type torque wrench (1 piece)
31121A	Coaxial calibration kits	DC to 6GHz	Open:±0.85° Short :±0.55° Load: VSWR<1.029 Adapter: VSWR<1.04	3.5mm male open (1 piece) 3.5mm female open (1 piece) 3.5mm male short (1 piece) 3.5mm female short (1 piece) 3.5mm female load (1 piece) 3.5mm male load (1 piece) 3.5mm(f)-3.5mm(f) adapter (1 piece) 3.5mm(m)-3.5mm(m) adapter (1 piece) 3.5mm(m)-3.5mm(f) adapter (1 piece) N(m)-3.5mm(m) adapter (1 piece) N(m)-3.5mm(f) adapter (1 piece) N(f)-3.5mm(m) adapter (1 piece) N(f)-3.5mm(f) adapter (1 piece) 3.5mm torque wrench (1 piece)

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31121C	Coaxial calibration kits	DC to 6GHz	Open : $\pm 0.85^\circ$ Short : $\pm 0.65^\circ$ Load: VSWR ≤ 1.029 Adapter: VSWR ≤ 1.052	3.5mm male open(1 piece) 3.5mm male short(1 piece) 3.5mm male load (1 piece) 3.5mm(m)-3.5mm(m) adapter (1 piece) 3.5mm(m)-3.5mm(f) adapter (1 piece) 3.5mm(f)-3.5mm(f) adapter (1 piece) N(m)-3.5mm(m) adapter (1 piece) N(m)-3.5mm(f) adapter (1 piece)
31121B	Coaxial calibration kits	DC to 6GHz	Open: $\pm 0.85^\circ$ Short: $\pm 0.65^\circ$ Load: VSWR ≤ 1.029 Adapter: VSWR ≤ 1.052	3.5mm female open(1 piece) 3.5mm female short (1 piece) 3.5mm female load (1 piece) 3.5mm(m)-3.5mm(m) adapter (1 piece) 3.5mm(m)-3.5mm(f) adapter (1 piece) 3.5mm(f)-3.5mm(f) adapter (1 piece) N(m)-3.5mm(m) adapter (1 piece) N(m)-3.5mm(f) adapter (1 piece)
20208	Coaxial calibration kits	50MHz to 7.5GHz	Open : $\pm 2.0^\circ$ (50MHz to 4GHz) $\pm 3.0^\circ$ (4GHz to 7.5GHz) Short : $\pm 1.8^\circ$ (50MHz to 4GHz) $\pm 2.5^\circ$ (4GHz to 7.5GHz) Load: VSWR < 1.066 Adapter: VSWR $< .066$ (50MHz to 4GHz) VSWR < 1.18 (4GHz to 7.5GHz)	7/16 type male open (1 piece) 7/16 type female open (1 piece) 7/16 type male short (1 piece) 7/16 type female short(1 piece) 7/16 type female load (1 piece) 7/16 type male load (1 piece) 7/16-KK adapter (1 piece) 7/16-KJ adapter (1 piece) 7/16-JJ adapter (1 piece)
20201	Coaxial calibration kits	DC to 9GHz	Open : $\pm 1.2^\circ$ Short : $\pm 1.0^\circ$ Load: VSWR < 1.029 Adapter: VSWR < 1.052	N-type male open (1 piece) N-type female open (1 piece) N-type male short (1 piece) N-type female short (1 piece) N-type female load (1 piece) N-type male load (1 piece) N(f)-N(f) adapter (1 piece) N(m)-N(m) adapter (1 piece) N(m)-N(f) adapter (1 piece) N-type torque wrench (1 piece)
20201A	Coaxial calibration kits	DC to 9GHz	Open : $\pm 1.2^\circ$ Short : $\pm 1.0^\circ$ Load: VSWR < 1.029	N-type 50 Ω T-type male calibration kit

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20201B	Coaxial calibration kits	DC to 9GHz	Open :±1.2° Short :±1.0° Load: VSWR<1.029	N-type 50Ω T-type female calibration kit
20202	Coaxial calibration kits	DC to 9GHz	Open :±1.0° Short :±0.85° Load: VSWR<1.029 Adapter: VSWR<1.052	3.5mm male open (1 piece) 3.5mm female open (1 piece) 3.5mm male short (1 piece) 3.5mm female short(1 piece) 3.5mm female load (1 piece) 3.5mm male load (1 piece) 3.5mm(f)-3.5mm(f) adapter (1 piece) 3.5mm(m)-3.5mm(m) adapter (1 piece) 3.5mm(m)-3.5mm(f) adapter (1 piece) N(m)-3.5mm(m) adapter (1 piece) N(m)-3.5mm(f) adapter (1 piece) N(f)-3.5mm(m) adapter (1 piece) N(f)-3.5mm(f) adapter (1 piece) 3.5mm torque wrench (1 piece)
20202A	Coaxial calibration kits	DC to 9GHz	Open :±0.85° Short :±0.65° Load: VSWR≤1.029 Adapter: VSWR≤1.041	3.5mm female open(1 piece) 3.5mm female short (1 piece) 3.5mm female load (1 piece) 3.5mm(f)-3.5mm(f) adapter (1 piece)
20202B	Coaxial calibration kits	DC to 9GHz	Open :±1.00° Short :±0.85° Load: VSWR≤1.029 Adapter: VSWR≤1.041	3.5mm male open (1 piece) 3.5mm male short (1 piece) 3.5mm male load (1 piece) 3.5mm(m)-3.5mm(m) adapter (1 piece)
31101	Coaxial calibration kits	DC to 18GHz	Open :±1.5° Short :±1.0° Load: VSWR<1.055 Adapter: VSWR<1.083	N-type male open(1 piece) N-type female open(1 piece) N-type male short (1 piece) N-type female short (1 piece) N-type female load (1 piece) N-type male load (1 piece) N(f)-N(f) adapter (1 piece) N(m)-N(m) adapter (1 piece) 7mm-N-type male adapter (2 pieces) 7mm-N-type female adapter (2 pieces) N-type torque wrench (1 piece) Hook wrench (1 piece)
31101A	Coaxial calibration kits	DC to 18GHz	Open :±1.5° Short :±1.0° Load: VSWR<1.055	N-type 50Ω T-type male calibration kit
31101B	Coaxial calibration kits	DC to 18GHz	Open :±1.5° Short :±1.0° Load: VSWR<1.055	N-type 50Ω T-type female calibration kit

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31111	Coaxial calibration kits	DC to 18GHz	Open : $\pm 0.5^\circ$ Short : $\pm 0.5^\circ$ Load: VSWR <1.04	7mm open (1 piece) 7mm short (1 piece) 7mm load (1 piece) N-type torque wrench (1 piece)
31101MA	Coaxial calibration kits	50MHz to 18GHz	Open : $\pm 3.0^\circ$ Short : $\pm 2.5^\circ$ Load: VSWR ≤ 1.08 Adapter: VSWR ≤ 1.1	N-type male Y-type calibration kit
31101MB	Coaxial calibration kits	50MHz to 18GHz	Open : $\pm 3.0^\circ$ Short : $\pm 2.5^\circ$ Load: VSWR ≤ 1.08 Adapter: VSWR ≤ 1.1	N-type female Y-type calibration kit
31121	Coaxial calibration kits	DC to 26.5GHz	Open : $\pm 1.5^\circ$ Short : $\pm 1.5^\circ$ Load: VSWR <1.041 Adapter: VSWR <1.106	3.5mm male open (1 piece) 3.5mm female open (1 piece) 3.5mm male short (1 piece) 3.5mm female short (1 piece) 3.5mm female load (1 piece) 3.5mm male load (1 piece) 3.5mm(f)-3.5mm(f) adapter (1 piece) 3.5mm(m)-3.5mm(m) adapter (1 piece) 3.5mm(m)-3.5mm(f) adapter (1 piece) 3.5mm torque wrench (1 piece)
31121MA	Coaxial calibration kits	50MHz to 26.5GHz	Open : $\pm 2.0^\circ$ Short : $\pm 2.0^\circ$ Load: VSWR ≤ 1.065 Adapter: VSWR ≤ 1.12	3.5mm male Y-type calibration kit
31121MB	Coaxial calibration kits	50MHz to 26.5GHz	Open : $\pm 2.0^\circ$ Short : $\pm 2.0^\circ$ Load: VSWR ≤ 1.065 Adapter: VSWR ≤ 1.12	3.5mm female Y-type calibration kit
31121MC	Coaxial calibration kits	50MHz to 26.5GHz	Open : $\pm 2.0^\circ$ Short : $\pm 2.0^\circ$ Load: VSWR ≤ 1.065	3.5mm male T-type calibration kit
31121MD	Coaxial calibration kits	50MHz to 26.5GHz	Open : $\pm 2.0^\circ$ Short : $\pm 2.0^\circ$ Load: VSWR ≤ 1.065	3.5mm female T-type calibration kit

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20209FB	Coaxial calibration kits	DC to 40GHz	Open :±2.0° Short :±2.0° Load: VSWR≤1.07 Adapter: VSWR≤1.12	2.92mm male open (1 piece) 2.92mm female open(1 piece) 2.92mm male short (1 piece) 2.92mm female short (1 piece) 2.92mm female load (1 piece) 2.92mm male load (1 piece) 2.92mm(f)-2.92mm(f) adapter (1 piece) 2.92mm(m)-2.92mm(m) adapter (1 piece) 2.92mm(m)-2.92mm(f) adapter (1 piece) 3.5mm torque wrench (1 piece)
20206MA	Coaxial calibration kits	100MHz to 40GHz	Open :±6.0° Short :±4.5° Load: VSWR≤1.17 Adapter: VSWR≤1.15	2.92mm male Y-type calibration kit
20206MB	Coaxial calibration kits	100MHz to 40GHz	Open :±6.0° Short: ±4.5° Load: VSWR≤1.17 Adapter: VSWR≤1.15	2.92mm female Y-type calibration kit
20206MC	Coaxial calibration kits	100MHz to 40GHz	Open :±6.0° Short :±4.5° Load: VSWR≤1.17	2.92mm male T-type calibration kit
20206MD	Coaxial calibration kits	100MHz to 40GHz	Open:±6.0° Short :±4.5° Load: VSWR≤1.17	2.92mm female T-type calibration kit
31123A	Coaxial calibration kits	DC to 50GHz	Open :±2.25° Short :±2.0° Load: VSWR<1.106 Adapter: VSWR<1.222	2.4mm male open (1 piece) 2.4mm female open (1 piece) 2.4mm male short (1 piece) 2.4mm female short (1 piece) 2.4mm female load (1 piece) 2.4mm male load (1 piece) 2.4mm(f)-2.4mm(f) adapter (1 piece) 2.4mm(m)-2.4mm(m) adapter (1 piece) 2.4mm(m)-2.4mm(f) adapter (1 piece) 3.5mm torque wrench (1 piece)
20209LA	Coaxial calibration kits	10MHz to 67GHz	Open :±3.0° Short :±2.5° Load: VSWR≤1.06 (10MHz~35GHz) Adapter: VSWR≤1.23	1.85mm male open (1 piece) 1.85mm female open (1 piece) 1.85mm male short s 1, 2, 3 and 4 (1 piece) 1.85mm female short s 1, 2, 3 and 4 (1 piece) 1.85mm female load (1 piece) 1.85mm male load (1 piece) 1.85mm(f)-1.85mm(f) adapter (1 piece) 1.85mm(m)-1.85mm(m) adapter (1 piece) 1.85mm(m)-1.85mm(f) adapter (1 piece) 3.5mm torque wrench (1 piece)

20209LB	Coaxial calibration kits	DC to 67GHz	Open : $\pm 3.0^\circ$ Short : $\pm 2.5^\circ$ Load: VSWR ≤ 1.12 Adapter: VSWR ≤ 1.23	1.85mm male open (1 piece) 1.85mm female open (1 piece) 1.85mm male short (1 piece) 1.85mm female short (1 piece) 1.85mm female load (1 piece) 1.85mm male load (1 piece) 1.85mm(f)-1.85mm(f) adapter (1 piece) 1.85mm(m)-1.85mm(m) adapter (1 piece) 1.85mm(m)-1.85mm(f) adapter (1 piece) 3.5mm torque wrench (1 piece)
20209QA	Coaxial calibration kits	DC to 120GHz	Open : $\pm 8.0^\circ$ Short : $\pm 5.5^\circ$ Load: VSWR \leq <1.14(10MHz~50GHz) Adapter: VSWR ≤ 1.38	1.0mm male open (1 piece) 1.0mm female open (1 piece) 1.0mm male short (1 piece) 1.0mm female short(1 piece) 1.0mm male shorts 1, 2, 3 and 4 (1 piece) 1.0mm female shorts 1, 2, 3 and 4 (1 piece) 1.0mm female load (1 piece) 1.0mm male load (1 piece) J-K adapter (1 piece) J-J adapter (1 piece) K-K adapter (1 piece) 1.0mm Clamp wrench(1 piece) 1.0mm torque wrench (1 piece)

Note 1: the technical specifications of DC-10MHz are based on 10MHz and are not tested separately.

Note 2: the phase offset of the open and short indicates the phase offset relative to the standard kit.

2. Environmental characteristics

Operation temperature range: +20 °C to +26 °C

Storage temperature range: -20 °C to +70 °C

Ordering information:

20204	DC to 3GHz calibration kit	31111	DC to 18GHz calibration kit
20205	DC to 3GHz calibration kit	31101MA	50MHz to 18GHz Y-type male calibration kit
20207	DC to 3GHz T-type male calibration kit	31101MB	50MHz to 18GHz Y-type female calibration kit
20207A	DC to 3GHz T-type female calibration kit	31121	DC to 26.5GHz calibration kit
31104	DC to 6GHz calibration kit	31121MA	50MHz to 26.5GHz Y-type male calibration kit
31121A	DC to 6GHz calibration kit	31121MB	50MHz to 26.5GHz Y-type female calibration kit
31121B	DC to 6GHz calibration kit	31121MC	50MHz to 26.5GHz T-type male calibration kit
31121C	DC to 6GHz calibration kit	31121MD	50MHz to 26.5GHz T-type female calibration kit
20208	50MHz to 7.5GHz calibration kit	20206MA	100MHz to 40GHz Y-type male calibration kit
20201	DC to 9GHz calibration kit	20206MB	100MHz to 40GHz Y-type female calibration kit
20201A	DC to 9GHz T-type male calibration kit	20206MC	100MHz to 40GHz T-type male calibration kit

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20201B	DC to 9GHz T-type female calibration kit	20206MD	100MHz to 40GHz T-type female calibration kit
20202	DC to 9GHz calibration kit	20209FB	DC to 40GHz calibration kit
20202A	DC to 9GHz calibration kit	31123A	DC to 50GHz calibration kit
20202B	DC to 9GHz calibration kit	20209LA	10MHz to 67GHz calibration kit
31101	DC to 18GHz calibration kit	20209LB	DC to 67GHz calibration kit
31101A	DC to 18GHz T-type male calibration kit	20209QA	DC to 120GHz calibration kit
31101B	DC to 18GHz T-type female calibration kit		

Notes:

1. Please ensure proper anti-static measures are in place before use.
2. Before use, please observe whether there are impurities on the port surface of the device, such as dust, cotton thread, metal debris, etc. These impurities have a great impact on the device's electrical performance, so it is necessary to clean the port surface of the device.
3. Before use, make sure that the pin depth of the device connected to the calibration kit is normal. If the pin depth is abnormal, it may cause permanent damage to the calibration kit connected to it.
4. When in use, it is recommended to use a torque wrench to tighten the connector sleeve to ensure the device operates properly.
5. When connecting the device in the calibration kit, please turn the sleeve on the male port of the device, but do not turn the calibration kit or adapter. Otherwise, the service life of the device will be shortened rapidly.
6. When the calibration kit is not in use, store the calibration kit in a safe place. The devices in the calibration kit shall be protected from dust, moisture, and severe vibration. If the device in the calibration piece accidentally falls to the ground, please contact the after-sales service personnel or qualified calibration unit to confirm that the performance of the device is acceptable before use.
7. Please measure the calibration kit regularly to ensure that it is used in an acceptable state.
8. The specifications of the above products can be changed without notice.