# Keysight N9311X
# RF and Microwave Accessory Kit for Low-cost Handheld and Benchtop Solutions

Technical Overview

N9311X RF and Microwave Accessory Kit complements the Keysight Technologies, Inc. low-cost handheld and benchtop solutions (N934xC/N9340B/N9330B/N9310A/N9320B/N9000A).

These accessories provide you with a complete solution for your measurement needs.


N9311X-500


N9311X-501


N9311X-504

# Antenna

| Antenna | Frequency range | Antenna gain | Weight | Dimension | Other information |
|---|---|---|---|---|---|
| N9311x-500 | 70 to 1000 MHz | N/A | 65 g | 113.5 cm (full length), 19.5 cm (retracted), 10 stages | 180 degrees tilt angle adjustable telescopic whip antenna, shipped with type N(m) to type BNC(f) adapter, 50 Ω |
| N9311x-501 | 700 to 2500 MHz | N/A | 70 g | 210 x 20 mm | Omni-directional, shipped with type N(m) to type SMA(f) adapter, 50 Ω |
| N9311x-504 [1] | 700 MHz to 4 GHz | 4 dBi | 270 g | 340 x200 x 25 mm | Logarithmic-periodic, 50 Ω |
| N9311x-508 [1] | 680 MHz to 8 GHz | 5 dBi | 250 g | 340 x 200 x 25 mm | Logarithmic-periodic, 50 Ω |
| N9311x-518 [1] | 680 MHz to18 GHz | 5 dBi | 250 g | 340 x 200 x 25 mm | Logarithmic-periodic, 50 Ω |

1. N9311x-504/508/518 shipping package includes: Antenna, aluminum design carrycase, detachable pistol grip with "miniature tripod" mode, and type N to type SMA toolset


N9311X-551

# Bandpass Filter

| Bandpass filter | 3 dB passband | Rejection | Insertion loss | VSWR | Impedance |
|---|---|---|---|---|---|
| N9311X-550 | 814 to 850 MHz | ≥36 dBc @ 740 MHz<br>≥36 dBc @ 915 MHz | ≤ 0.5 dB | ≤1.5 | 50 Ω |
| N9311X-551 | 880 to 915 MHz | ≥35 dBc @ 862 MHz<br>≥35 dBc @ 932 MHz | ≤ 1 dB | ≤1.5 | 50 Ω |
| N9311X-552 | 1707.5 to 1787.5MHz | ≥35 dBc @ 1550 MHz<br>≥35 dBc @ 1925 MHz | ≤ 0.4 dB | ≤1.5 | 50 Ω |
| N9311X-553 | 1845 to 1915 MHz | ≥35 dBc @ 1770 MHz<br>≥35 dBc @ 1986 MHz | ≤ 0.6 dB | ≤1.5 | 50 Ω |
| N9311X-554 | 1910 to 1990 MHz | ≥35 dBc @ 1825 MHz<br>≥35 dBc @ 2070 MHz | ≤ 0.6 dB | ≤1.5 | 50 Ω |

# Cable

| N9311X-580 | N9311X-581 | N9311X-582 | N9311X-583 | N9311X-585 | N9311X-586 |
|---|---|---|---|---|---|
| Phase stable, 1.5 m, type N(m) to N(m), DC to 18 GHz, 50 Ω | Phase stable, 3.0 m, type N(m) to N(m), DC to 18 GHz, 50 Ω | 1.5 m, type SMA(m) to SMA(m), DC to 8 GHz, 50 Ω | 1.5 m, type BNC(m) to BNC(m), DC to 1 GHz, 50 Ω | Phase stable, 1.5 m, type N(m) to DIN(f), DC to 18 GHz, 50 Ω | Phase stable, 1.5 m, type N(m) to N(f), DC to 18 GHz, 50 Ω |

# Adapter

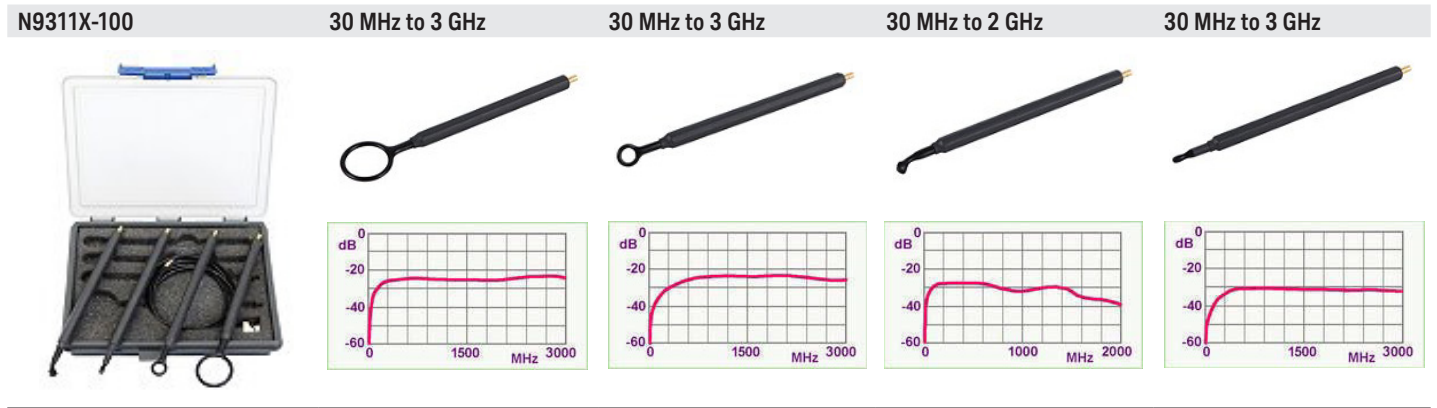| N9311X-545 | N9311X-541 | N9311X-540 | N9311X-543 | N9311X-542 | N9311X-544 | N9311X-546 | N9311X-547 |
|---|---|---|---|---|---|---|---|
| Type N(f) to SMA(m), DC to 12.4 GHz, 50 Ω | Type N(m) to SMA(f), DC to 12.4 GHz, 50 Ω | Type N(m) to BNC(f), DC to 2 GHz, 50 Ω | Type N(f) to BNC(m), DC to 4 GHz, 50 Ω | Type N(f) to 7/16 DIN(f), DC to 7.5 GHz, 50 Ω | Type N(f) to 7/16 DIN(m), DC to 7.5 GHz, 50 Ω | Type N(f) to N(f), DC to 18 GHz, 50 Ω | Type N(m) to 7/16 DIN(f), DC to 7.5 GHz, 50 Ω |





N9311X-561

# Attenuator

| Attenuator | Attenuation | Port | VSWR | Power rating | Length | Weight | Impedance |
|---|---|---|---|---|---|---|---|
| N9311X-560 | 40 dB | N(m)toN(f) | DC to 4.0 GHz: 1.15 4.0 to 8.5 GHz: 1.2 | 50 watts average | 111.76mm(4.37 inch) | 0.28 kg/10 oz | 50 Ω |
| N9311X-561 | 40 dB | N(m)toN(f) | DC to 4.0 GHz: 1.15 4.0 to 8.5 GHz: 1.2 | 10 watts average | 67.3 mm (2.65 inch) | 0.085 kg/3oz | 50 Ω |
| N9311X-562 | 40 dB | N(m)toN(f) | DC to 4.0 GHz: 1.15 4.0 to 8.5 GHz: 1.2 | 100 watts average | 112.01mm(4.41 inch) | 1.5 kg/3.3 lb | 50 Ω |

# Calibrator

| Calibrator | Type | Frequency range | Directivity | Impedance | Connector | Other |
|---|---|---|---|---|---|---|
| N9311x-201 | Mechanical calibrator | DC to 7 GHz | 42 dB | 50 Ω | N(m) | 3-in-1 OSL |

# Close Field Probe Set

| N9311X-100 | 30 MHz to 3 GHz | 30 MHz to 3 GHz | 30 MHz to 2 GHz | 30 MHz to 3 GHz |
|---|---|---|---|---|

# Keysight low-cost Handheld and Bench Instruments

| Title | Website |
|---|---|
| N934xC/N9340B Handheld Spectrum Analyzer(HSA) | www.keysight.com/find/hsa |
| N9330B Handheld Cable and Anternna Tester | www.keysight.com/find/n9330 |
| N9000A CXA Signal Analyzer | www.keysight.com/find/cxa |
| N9310A RF Signal Generator | www.keysight.com/find/n9310a |
| N9320B RF Spectrum Analyzer | www.keysight.com/find/n9320b |

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