

3126 PRECISION SLEEVE DIPOLE

ETS-Lindgren's 3126 Series of Precision Reference Sleeve Dipoles are truly omnidirectional antennas, having an electric dipole pattern approaching that of a half-wave resonant dipole, with typical gains between 1.5 and 2.0 dB.



ETS-Lindgren's 3126 Series of Precision Reference Sleeve Dipoles are true omnidirectional antennas, having an electric dipole pattern approaching that of a half-wave resonant dipole, with typical gains between 1.5 and 2.0 dB. The sleeve dipole design allows the antenna to be end-fed to avoid cable and feedpoint interactions that interfere with the performance of the antenna. Integral quarter wave chokes and/or ferrite loading (depending on frequency range) also help to reduce cable interaction. This design also provides exceptional symmetry (typically better than ± 0.1 dB (0.2 dB peak-to-null) to meet or exceed CTIA criteria for ripple test antennas.

All 3126 Series Dipoles are designed with a VSWR less than 1.2:1 in at least a ± 10 MHz band around the labeled center frequency. Gain values and ± 0.1 dB symmetry certification are provided for a 200 MHz to 300 MHz band (depending on model) centered about the labeled frequency. This dipole has a typical VSWR $<3:1$ across this entire band, and may be used for precision range calibrations across the entire band provided appropriate padding (~ 10 dB) is used to minimize possible standing wave effects on cables. The dipoles have a nominal $50\ \Omega$ impedance, a maximum continuous transmit power of one watt, and are equipped with a female SMA connector.

The dipoles are calibrated using an A2LA accredited process with a typical measurement uncertainty on the order of ± 0.2 dB. Gain, VSWR, max. ripple, and measurement uncertainty values are provided with each calibration.

Key Features

- Meets CTIA ± 0.1 dB Symmetry Requirement
- Precision Gain for Range Calibration
- Range of Frequencies to Cover Wireless Device Bands

Specifications

Electrical Specifications

All Models

Impedance (Nominal): 50Ω

Maximum Continuous Power: 1W

VSWR: <3:1 Typical

Connectors: SMA Female

Pattern Type: Omnidirectional

Polarization: Linear

Frequency: corresponds with hyphenated model number

Model	Frequency
3126-450	450 MHz
3126-550	550 MHz
3126-700	700 MHz
3126-722	722 MHz
3126-750	750 MHz
3126-790	790 MHz
3126-800	800 MHz
3126-836	836 MHz
3126-850	850 MHz
3126-860	860 MHz
3126-870	870 MHz
3126-880	880 MHz
3126-900	900 MHz
3126-920	920 MHz
3126-950	950 MHz
3126-1050	1050 MHz
3126-1225	1225 MHz
3126-1300	1300 MHz
3126-1325	1325 MHz
3126-1400	1400 MHz
3126-1475	1475 MHz
3126-1550	1550 MHz
3126-1575	1575 MHz

3126-1625	1625 MHz
3126-1700	1700 MHz
3126-1732	1732 MHz
3126-1775	1775 MHz
3126-1790	1790 MHz
3126-1795	1795 MHz
3126-1800	1800 MHz
3126-1842	1842 MHz
3126-1845	1845 MHz
3126-1850	1850 MHz
3126-1880	1880 MHz
3126-1900	1900 MHz
3126-1920	1920 MHz
3126-1925	1925 MHz
3126-2000	2000 MHz
3126-2045	2045 MHz
3126-2075	2075 MHz
3126-2100	2100 MHz
3126-2140	2140 MHz
3126-2145	2145 MHz
3126-2150	2150 MHz
3126-2225	2225 MHz
3126-2300	2300 MHz
3126-2375	2375 MHz
3126-2400	2400 MHz
3126-2450	2450 MHz
3126-2500	2500 MHz
3126-2525	2525 MHz
3126-2600	2600 MHz
3126-2650	2650 MHz

3126-2700	2700 MHz
3126-2840	2840 MHz
3126-2900	2900 MHz
3126-3600	3600 MHz
3126-5500	5500 MHz

Physical Specifications

Model	Diameter B	Diameter C
3126-450	2.69 cm (1.06 in)	45.54 cm (17.93 in)
3126-550	2.69 cm (1.06 in)	45.54 cm (17.93 in)
3126-700	2.69 cm (1.06 in)	39.17 cm (15.42 in)
3126-800	2.69 cm (1.06 in)	26.47 cm (10.42 in)
3126-920	2.69 cm (1.06 in)	25.20 cm (9.92 in)
3126-1225	2.69 cm (1.06 in)	23.93 cm (9.42 in)
3126-1550	1.9 cm (0.75 in)	22.58 cm (8.89 in)
3126-1700	1.9 cm (0.75 in)	21.39 cm (8.42 in)
3126-1800	1.9 cm (0.75 in)	20.75 cm (8.17 in)
3126-2045	1.9 cm (0.75 in)	20.12 cm (7.92 in)
3126-2145	1.9 cm (0.75 in)	20.12 cm (7.92 in)
3126-2450	1.9 cm (0.75 in)	19.79 cm (7.79 in)
3126-2600	1.9 cm (0.75 in)	19.79 cm (7.79 in)
3126-3600	7.62 cm (3.00 in)	21.11 cm (8.31 in)
3126-5500	7.62 cm (3.00 in)	21.11 cm (8.31 in)

Other Specifications

- Sleeve Dipole Antenna
- A2LA Accredited Precision Calibration and Symmetry Certification Including Signed Certification of Calibration
- Manual

Product Charts

3126 Precision Sleeve
Dipole Diagram
Models 3126-700,
3126-836, 3126-880



3126 Precision Sleeve
Dipole Diagram
Models 3126-1575,
3126-1880, 3126-2450

