

## DIPOLES 3126 Precision Sleeve Dipole

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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  $\pm 0.1$  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  $\pm 10$  MHz band around the labeled center frequency. Gain values and  $\pm 0.1$  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 ( $\sim 10$  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  $\pm 0.2$  dB. Gain, VSWR, max. ripple, and measurement uncertainty values are provided with each calibration.

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### Key Features

- Meets CTIA  $\pm 0.1$  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 A	Diameter B	Diameter C
3126-450	1.9 cm (0.75 in)	2.69 cm (1.06 in)	45.54 cm (17.93 in)
3126-550	1.9 cm (0.75 in)	2.69 cm (1.06 in)	45.54 cm (17.93 in)
3126-700	1.9 cm (0.75 in)	2.69 cm (1.06 in)	39.17 cm (15.42 in)
3126-800	1.9 cm (0.75 in)	2.69 cm (1.06 in)	26.47 cm (10.42 in)
3126-920	1.9 cm (0.75 in)	2.69 cm (1.06 in)	25.20 cm (9.92 in)
3126-1225	1.9 cm (0.75 in)	2.69 cm (1.06 in)	23.93 cm (9.42 in)
3126-1550	1.9 cm (0.75 in)	1.9 cm (0.75 in)	22.58 cm (8.89 in)
3126-1700	1.9 cm (0.75 in)	1.9 cm (0.75 in)	21.39 cm (8.42 in)
3126-1800	1.9 cm (0.75 in)	1.9 cm (0.75 in)	20.75 cm (8.17 in)
3126-2045	1.9 cm (0.75 in)	1.9 cm (0.75 in)	20.12 cm (7.92 in)
3126-2145	1.9 cm (0.75 in)	1.9 cm (0.75 in)	20.12 cm (7.92 in)
3126-2450	1.9 cm (0.75 in)	1.9 cm (0.75 in)	19.79 cm (7.79 in)
3126-2600	1.9 cm (0.75 in)	1.9 cm (0.75 in)	19.79 cm (7.79 in)
3126-3600	1.9 cm (0.75 in)	7.62 cm (3.00 in)	21.11 cm (8.31 in)
3126-5500	1.9 cm (0.75 in)	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

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



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

