

ANTENNA MODEL 3186



MODEL 3186

- 1 GHz to 18 GHz Frequency Range
- 2:1 VSWR Average
- Up to 20W Input Power
- Constant E- and H-Plane Beamwidth
- Flat Directivity

ETS-Lindgren's Model 3186 is a dual stacked log periodic dipole array antenna (LPDA), each of the two separate LPDAs comprising the dual array are 100 antennas. When assembled in parallel, the results are a 50 input impedance array. This array provides increased gain when compared to a single LPDA. The arrangement of the two LPDA in the arrays provides a very constant pattern across the entire frequency range.

This antenna is ideal as a receive antenna for CISPR emissions testing above 1 GHz. It is also ideal when performing the site VSWR test as per CISPR 16.

Frequency Range

The antenna covers a frequency range of 1 GHz to 18 GHz, making it ideal as a receive antenna for CISPR 16 based testing above 1 GHz. This antenna can be used with ETS-Lindgren's Model 3183 for performing the site VSWR chamber validation method per CISPR 16.

Low VSWR

The typical VSWR for the model 3186 is less than 2:1.

Low Input Power

This antenna is mainly a receive antenna, with a maximum input power of 20 W continuous wave and a peak power of 30 W.

Constant Beamwidth and Flat Directivity

The model 3186 was designed to provide a very constant illumination from 1 GHz to 18 GHz. The Beamwidth in the two principal planes is 59.8 degrees for the E-plane (the polarization plane) and 57.0 degrees for the H-plane (the orthogonal plane) while the directivity is about 10 dB across the entire frequency range.

Technical Specifications

Electrical	
Frequency Minimum	1 GHz
Frequency Maximum	18 GHz
Impedance (Nominal)	50
Maximum Continuous Power	20 W
Peak Power	30 W
VSWR Ratio (Average)	2:1
Connectors	SMA (Female)
Pattern Type	Directional
Polarization	Linear
Physical	
Height	19.7 cm (7.76 in)
Width	19.7 cm (7.76 in)
Depth	44.1 cm (17.36 in)
Weight	0.7 kg (1.54 lb)

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