

# **EMC** Antennas **Dual Stacked** LPDA

Model 3186

#### FEATURES:

- 1 GHz — 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 Dual Stacked LPDA Antenna

#### 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  $100 \Omega$  antennas. When assembled in parallel, the results are a 50  $\Omega$  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.

#### **FEATURES 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 20W continuous wave and a peak power of 30W.

#### **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.

#### **STANDARD CONFIGURATION**

- Antenna
- Mounting Fixture for 1/4 20 Thread
- Individually calibrated factors at 3m per SAE ARP 958
- Manual

#### **OPTIONS**

- 4-TR Tripod
- 7-TR Tripod





## **Electrical Specifications**

MODEL	FREQUENCY Range	MAXIMUM Continuous Power	IMPEDANCE (Nominal)	VSWR (AVG)	CONNECTOR
3186	1 GHz – 18 GHz	20W	50 Ω	2:1	SMA (Female)

# **Physical Specifications**

MODEL	WIDTH	LENGTH*	HEIGHT	WEIGHT
3186	19.7 cm	44.1 cm	19.7 cm	.7 kg
	7.8 in	17.4 in	7.8 in	1.5 lb

\*Includes a 13.9 cm (5.5 in) Stinger Antenna Mount



## **Computed Typical Beamwidth**

### **Computed Typical Directivity**



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