

# EMC Antennas

## Dual Stacked LPDA

Model 3150B

### Features:

- 80 MHz to 1 GHz Frequency Range
- Avg. 2:1 VSWR Across Range
- Up to 5 kW Max. Input Power
- Suitable for Immunity Testing
- Individually Calibrated



*ETS-Lindgren's Model 3150B Dual Stacked LPDA Antenna*

**THE MODEL 3150B DUAL STACKED LPDA** is dual stacked log periodic dipole array antenna (LPDA), with each of the two separate LPDAs being 100  $\Omega$  antennas. When assembled in parallel, the results is a 50  $\Omega$  input impedance array. This array provides increased gain when compared to a single LPDA.

Low VSWR provides an excellent match with the amplifier, resulting in a high field generated related to input power. This antenna is suitable for situations where high fields need to be generated, such as military and in automotive EMC applications.

### FEATURES

#### Frequency Range

The Model 3150B covers from 80 MHz to 1 GHz frequency range. The antenna can generate 200 V/m with less than 1 kW of input power at 1 m distance for the 100 MHz to 1 GHz range. When combined with ETS-Lindgren's 3159 or 3158

High Power Biconical Antennas, the 3150B becomes integral part of ETS-Lindgren's high severity level immunity solution.

#### VSWR Levels

The average VSWR is 2:1 across the frequency range.

#### Input Power

The Model 3150B comes fitted with a 7/16 coaxial connector, which can handle 3 kW at 1 GHz and up to 5 kW of input power at 80 MHz.

#### Immunity Testing

The Model 3150B generates high fields as required in automotive EMC applications per standards such as ISO 11541-2 or MIL-STD susceptibility testing. Additionally, this antenna can be used as a receive antenna.

#### Individually Calibrated

The 3150B is individually calibrated at 3 m per ANSI C63.5 and SAE ARP 958.

### STANDARD CONFIGURATION

- Antenna Assembly (Antenna Ships Disassembled)
- Mount for ETS-Lindgren 7-TR Tripod
- Individually calibrated at 3 m per SAE ARP 958 at our A2LA accredited lab.
- Actual antenna factors and a Signed Certificate of Calibration Conformance included in manual.
- Manual

### OPTIONS

- For easy horizontal and vertical polarization changes, the 7-TR tripod is recommended. This tripod requires the 3150B Cross Boom. Please specify this cross boom when ordering.

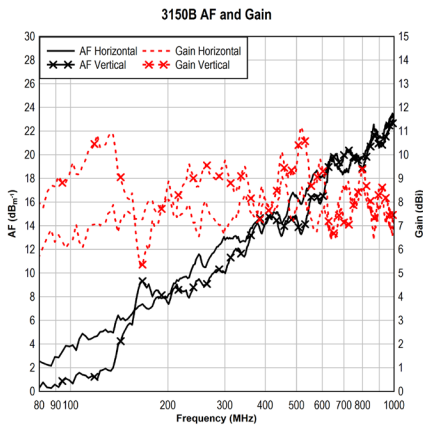
## Electrical Specifications

MODEL	FREQUENCY RANGE	VSWR RATIO (AVG)	MAXIMUM CONTINUOUS POWER	PEAK POWER	IMPEDANCE (NOMINAL)	CONNECTORS
3150B	80 MHz – 1 GHz	2:1	5 kW – 2.5 kW	7 kW – 4 kW	50 Ω	7/16 Female

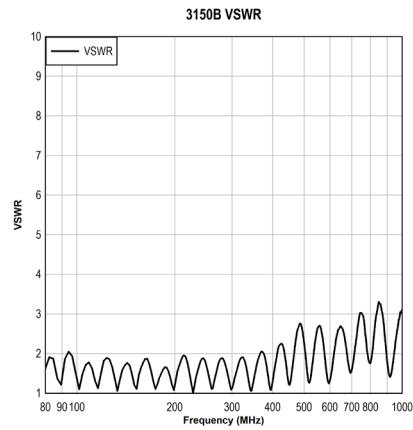
## Physical Specifications

MODEL	WIDTH	DEPTH	HEIGHT	WEIGHT
3150B	209.0 cm 82.3 in	150.4 cm 59.2 in	203.2 cm 80.0 in	10.6 kg 23.3 lb

## Typical Antenna Factors and Gain



## Typical VSWR



## Typical Avg. Power Required

