ETS-Lindgren’s Model 3150B Dual Stacked LPDA Antenna

**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

**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.
**EMC Antennas**

**Dual Stacked LPDA**

Model 3150B

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### Electrical Specifications

<table>
<thead>
<tr>
<th>MODEL</th>
<th>FREQUENCY RANGE</th>
<th>VSWR (AVD)</th>
<th>MAXIMUM POWER</th>
<th>PEAK POWER</th>
<th>IMPEDANCE</th>
<th>CONNECTORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>3150B</td>
<td>80 MHz – 1 GHz</td>
<td>2:1</td>
<td>5 kW – 2.5 kW</td>
<td>7 kW – 4 kW</td>
<td>50 Ω</td>
<td>7/16 Female</td>
</tr>
</tbody>
</table>

### Physical Specifications

<table>
<thead>
<tr>
<th>MODEL</th>
<th>WIDTH</th>
<th>DEPTH</th>
<th>HEIGHT</th>
<th>WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>3150B</td>
<td>209.0 cm</td>
<td>150.4 cm</td>
<td>203.2 cm</td>
<td>10.6 kg</td>
</tr>
<tr>
<td></td>
<td>82.3 in</td>
<td>59.2 in</td>
<td>80.0 in</td>
<td>23.3 lb</td>
</tr>
</tbody>
</table>

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### Typical Antenna Factors and Gain

**3150B AF and Gain**

- AF Horizontal
- Gain Horizontal
- AF Vertical
- Gain Vertical

### Typical VSWR

**3150B VSWR**

### Typical Avg. Power Required

**3150B Measured Power Requirements**

- With real trench and probe 200m above.