The Model 3142E BiconiLog is a hybrid antenna that combines innovative design, compact size, and excellent performance. This antenna enables users to measure a frequency range of 30 MHz to 6 GHz in one sweep, negating the need for multiple antennas and time-consuming equipment setup. Accuracy and repeatability are improved, while time and money are saved. This BiconiLog is designed as a dual-purpose antenna that can be used for both immunity and emission testing.

Features:
- 30 MHz to 6 GHz Frequency Range
- Avg. 2:1 VSWR Above 50 MHz
- For Emissions and Immunity Testing
- Flexible Mounting
- Individually Calibrated

VSWR Levels
The average VSWR is 2:1 above 50 MHz, an excellent level at this low frequency for an antenna this size.

Emissions and Immunity Antenna
Emission measurements can be performed without having to change antennas.

For immunity measurements, the 3142E covers the typical 80 MHz to 6 GHz range.

Flexible Mounting
The Model 3142E comes with a bracket that accepts either a 1/4” 20 thread screw or rear stinger mount.

Individually Calibrated
The 3142E is individually calibrated at 10 m per ANSI C63.5 and calibrations at 1 m and 3 m per SAE ARP 958.

Standard Configuration
- Antenna Assembly
- Mounting Bracket for ETS-Lindgren or Other Tripod Mounts with 1/4” x 20 Threads
- Stinger Mount
- Individually calibrated:
  -- 10 m per ANSI C63.5
  -- 3 m per SAE ARP 958
  -- 1 m per SAE ARP 958
- Actual Antenna Factors and a Signed Certificate of Calibration Conformance Included in Manual
- Manual

Options
ETS-Lindgren offers several non-metallic, non-reflective tripods. For easy horizontal and vertical polarization changes, the 7-TR tripod is recommended.
EMC Antennas

BiConiLog

Model 3142E

Electrical Specifications

<table>
<thead>
<tr>
<th>MODEL</th>
<th>FREQUENCY RANGE</th>
<th>VSWR RATIO (AVG)</th>
<th>MAXIMUM CONTINUOUS POWER</th>
<th>PEAK POWER</th>
<th>IMPEDANCE (NOMINAL)</th>
<th>CONNECTORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>3142E</td>
<td>30 MHz – 60 MHz</td>
<td>2:1</td>
<td>500 W</td>
<td>800 W</td>
<td>50 Ω</td>
<td>Type N Female (1)</td>
</tr>
<tr>
<td></td>
<td>60 MHz – 600 MHz</td>
<td></td>
<td>1 kW</td>
<td>1.5 kW</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>600 MHz – 1 GHz</td>
<td></td>
<td>500 W</td>
<td>800 W</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 GHz – 6 GHz</td>
<td></td>
<td>200 W</td>
<td>300 W</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Physical Specifications

<table>
<thead>
<tr>
<th>MODEL</th>
<th>WIDTH</th>
<th>DEPTH</th>
<th>HEIGHT</th>
<th>WEIGHT</th>
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</thead>
<tbody>
<tr>
<td>3142E</td>
<td>133.9 cm</td>
<td>139.2 cm</td>
<td>76.2 cm</td>
<td>5.7 kg</td>
</tr>
<tr>
<td></td>
<td>52.7 in</td>
<td>54.8 in</td>
<td>30.0 in</td>
<td>12.5 lb</td>
</tr>
</tbody>
</table>

Typical Antenna Factors and Gain

Typical Avg. Power Required in Horizontal Polarization

Typical VSWR

Typical Avg. Power Required in Vertical Polarization