

## 3142E BICONILOG ANTENNA

ETS-Lindgren's Model 3142E BiConiLog™ is a hybrid antenna that combines innovative design, compact size, and excellent performance.



ETS-Lindgren's Model 3142E BiConiLog 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.

### Key Features

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

### Features

#### Frequency Range

The 3142E antenna increases the upper frequency limit to accommodate the new upper limit of 6 GHz included in the IEC 61000-4-3 standard.

#### 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 in 20 thread screw or rear stinger mount.

## Specifications

### Electrical Specifications

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**Frequency Minimum:** 30 MHz

**Frequency Maximum:** 6 GHz

**Impedance (Nominal):** 50  $\Omega$

**VSWR Ratio (AVG):** 2:1

**Connectors:** Type N (F)

**Pattern Type:** Directional

**Polarization:** Linear

### Physical Specifications

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**Height:** 76.2 cm (30.0 in)

**Width:** 133.9 cm (52.7 in)

**Depth:** 139.2 cm (54.8 in)

**Weight:** 5.7 kg ( 12.6 lb)

### Additional Specifications

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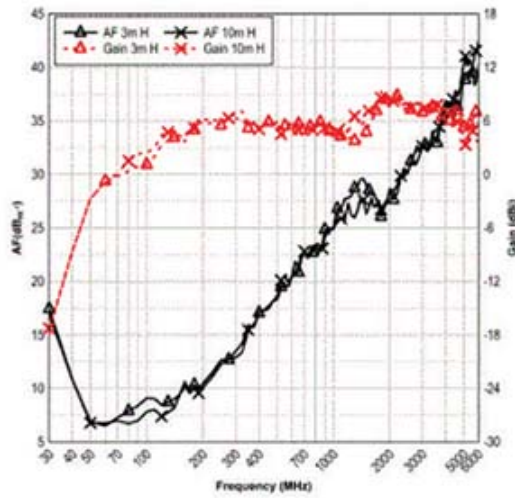
- Antenna Assembly
- Rear "Stinger" Mount
- Drilled Mounting Bracket Accepts ETS-Lindgren or Other Tripod Mounts with 1/4 in x 20 Threads
- Individually Calibrated at 10 m H Pol. per ANSI C63.5
- Actual Factors and a Signed Certificate of Calibration Conformance are Included in Manual
- Manual

### Product Options

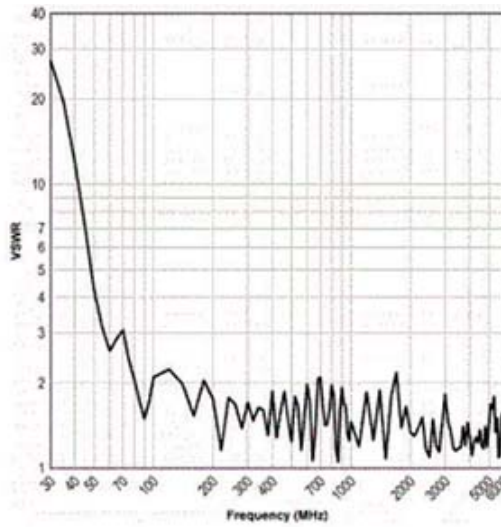
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Product Charts

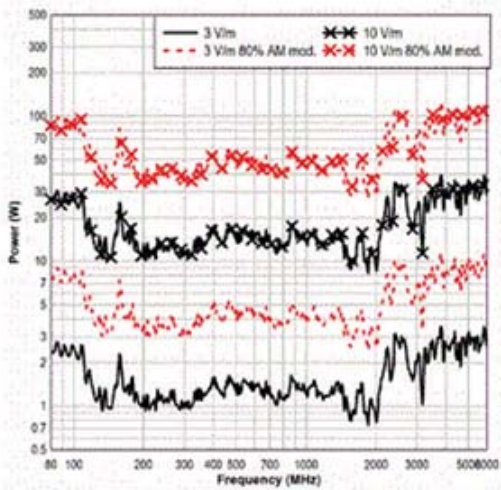
**3142E BiConiLog Antenna  
Typical Antenna Factors  
and Gain**



**3142E BiConiLog Antenna  
Typical VSWR**



**3142E BiConiLog Antenna  
Power Requirements in  
FACT™ 3 Chamber with  
Ferrite Floor  
Horizontal Polarization  
Average of the Power  
Required for each of the  
16 Points on the Grid**



**3142E BiConiLog Antenna  
Power Requirements in  
FACT™ 3 Chamber with  
Ferrite Floor  
Vertical Polarization  
Average of the Power  
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