

## 3143B BICONILOG ANTENNA

ETS-Lindgren's Model 3143B BiConiLog™ is a hybrid antenna that combines innovative design, compact size, and excellent performance.



ETS-Lindgren's Model 3143B 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 1 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.

This model includes a stinger mount as standard equipment. Individual antenna calibration data is provided for emission testing.

### Key Features

- 30 MHz to 1 GHz Frequency Range
- 3:1 VSWR Above 70 MHz For Emissions and Immunity Testing
- Flexible Mounting
- Individually Calibrated

### Features

#### Frequency Range

The model 3143B frequency range covers from 30 MHz to 1 GHz. This frequency range covers the necessary range of emissions testing on a traditional OATS/semi-anechoic chamber setup.

#### VSWR Levels

Typical VSWR for the 3143B is >3:1 above 70 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 3143B covers the typical 80 MHz to 1 GHz range.

#### Flexible Mounting System

The model 3143B comes with a bracket that accepts either a 1/4 in x 20 thread screw or rear stinger mount.

## Specifications

### Electrical Specifications

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Frequency Maximum: 1 GHz  
Frequency Minimum: 30 MHz  
Pattern Type: Directional  
Polarization: Linear

### Physical Specifications

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Width: 133.9 cm (52.72 in)  
Depth: 124.3 cm (48.94 in)  
Height: 76.2 cm (30.00 in)  
Weight: 5.5 kg (12.13 lb)

### Other Specifications

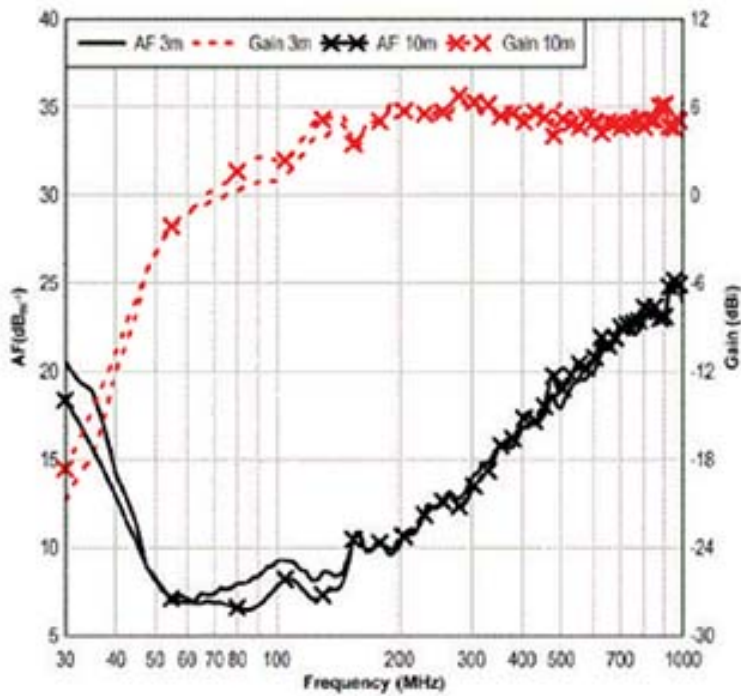
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- Antenna Assembly
- Mounting Bracket for ETS-Lindgren or Other Tripod Mounts with 1/4 in x 20 Threads
- Stinger Mount
- Individually Calibrated:
  - 10 m per ANSI C63.5
  - 3 m per SAE ARP 958
  - 1 m per SAE ARP 958
- Actual antenna factors and a signed Certificate of Calibration Conformance included in manual.
- Manual

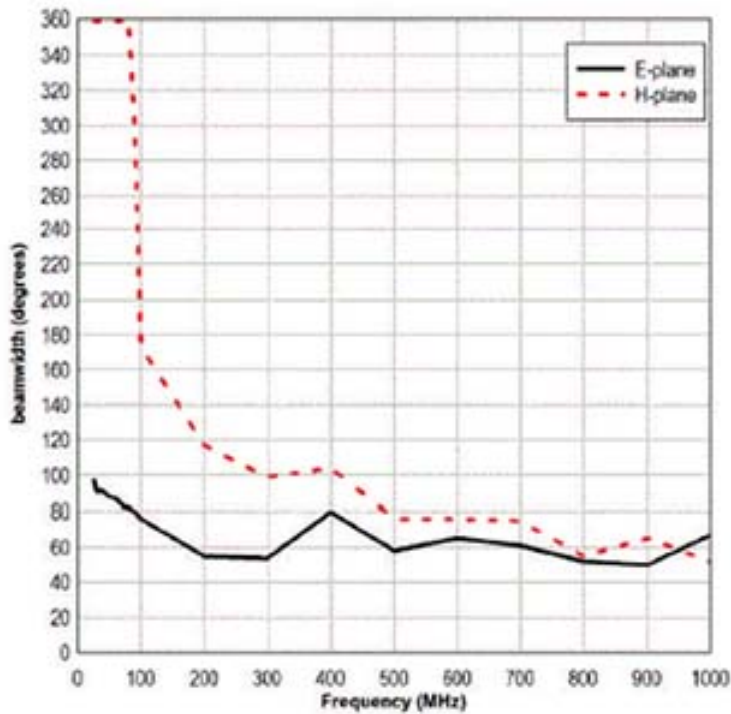
Product Charts

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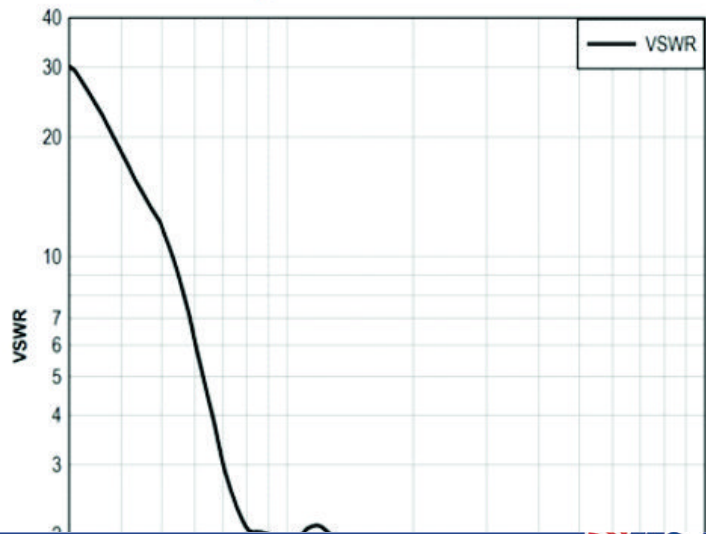
3143B BiConiLog  
Antenna Factor  
and Gain  
Typical Performance

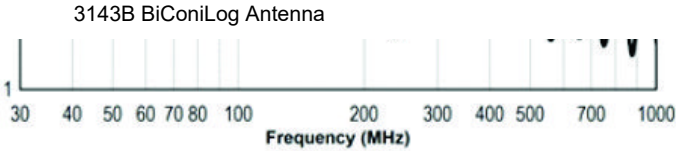


3143B BiConiLog  
Antenna  
Beamwidth  
Typical Performance

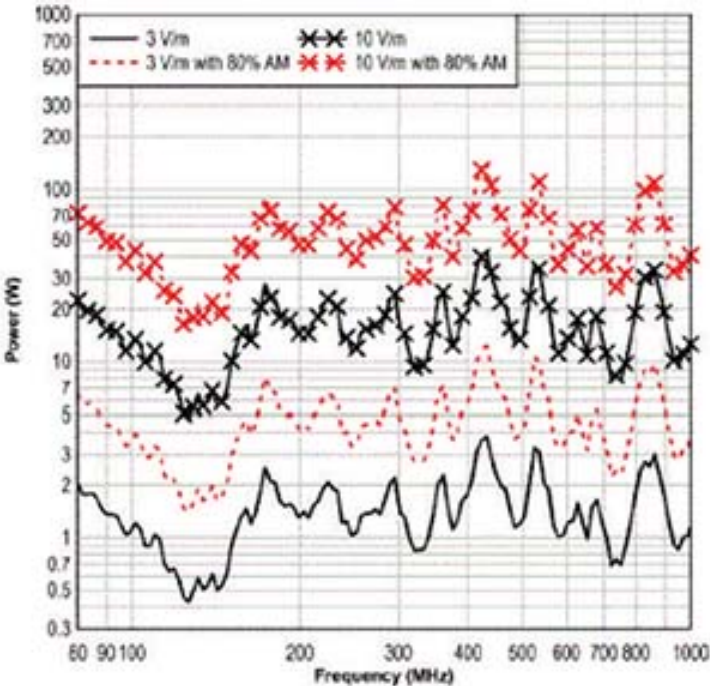


3143B BiConiLog  
Antenna  
VSWR  
Typical Performance

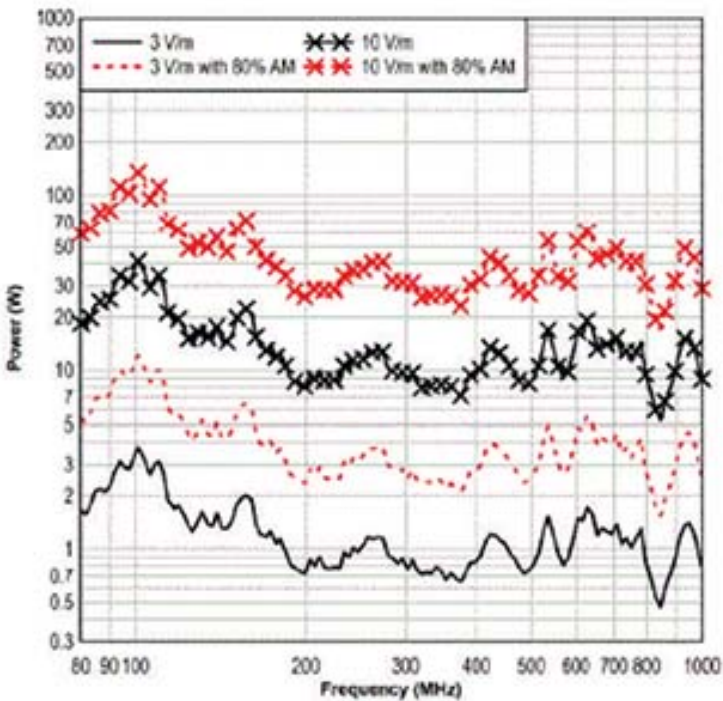




3143B BiConiLog  
Antenna  
Typical Average  
Power Required  
in Horizontal Polarization  
at 3 m



3143B BiConiLog  
Antenna  
Typical Average  
Power Required  
in Vertical Polarization  
at 3 m



3143B BiConiLog  
Antenna  
Symmetry

