BICONILOGS 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

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

Polarization: Linear

Physical Specifications

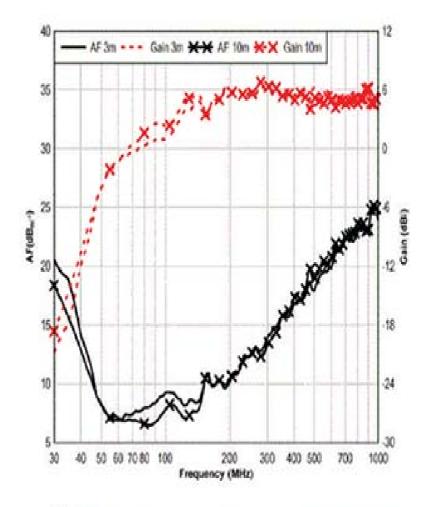
Width: 133.9 cm (52.72 in) Depth: 124.3 cm (48.94 in) Height: 76.2 cm (30.00 in) Weight: 5.5 kg (12.13 lb)

Other Specifications

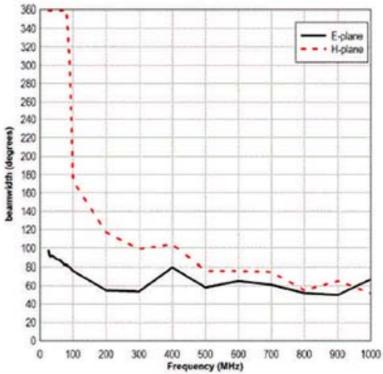
- Antenna Assembly
- Mounting Bracket for ETS-Lindgren or Other Tripod Mounts with 1/4 in x 20 Threads
- Stinger Mount
- Individually Calibrated:
 - 10 m per ANSI C63.5
 - o 3 m per SAE ARP 958
 - o 1 m per SAE ARP 958
- Actual antenna factors and a signed Certificate of Calibration Conformance included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



3143B BiConiLog Antenna Factor and Gain Typical Performance



3143B BiConiLog Antenna Beamwidth Typical Performance



3143B BiConiLog Antenna VSWR Typical Performance

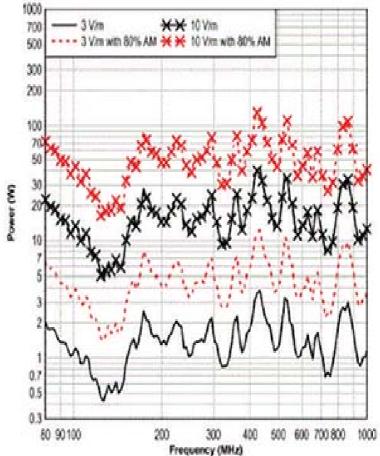
20 VSWR

10 VSWR

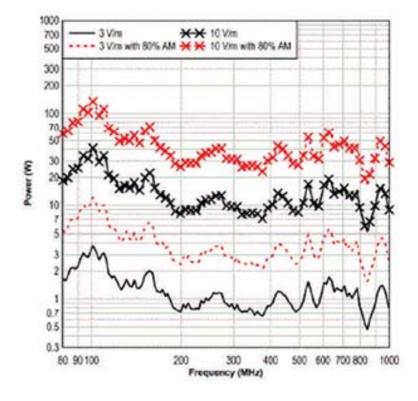
7 6 5 4 4 3 2 2 4 50 60 70 80 100 200 300 400 500 700 1000

Frequency (MHz)

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

