

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

Frequency Minimum: 30 MHz

Frequency Maximum: 6 GHz

Impedance (Nominal): 50 Ω

VSWR Ratio (AVG): 2:1

Connectors: Type N (F)

Pattern Type: Directional

Polarization: Linear

Physical Specifications

Height: 76.2 cm (30.0 in)

Width: 133.9 cm (52.7 in)

Depth: 139.2 cm (54.8 in)

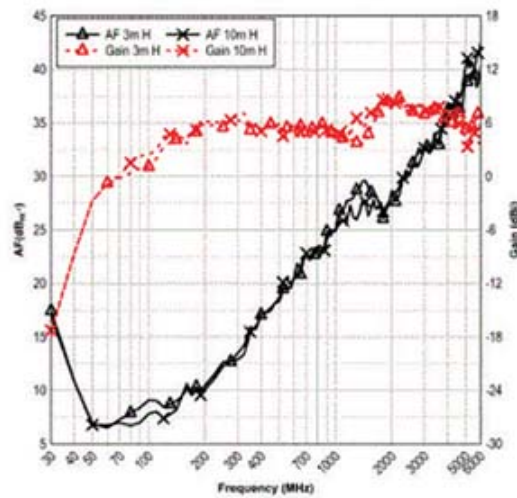
Weight: 5.7 kg (12.6 lb)

Other Specifications

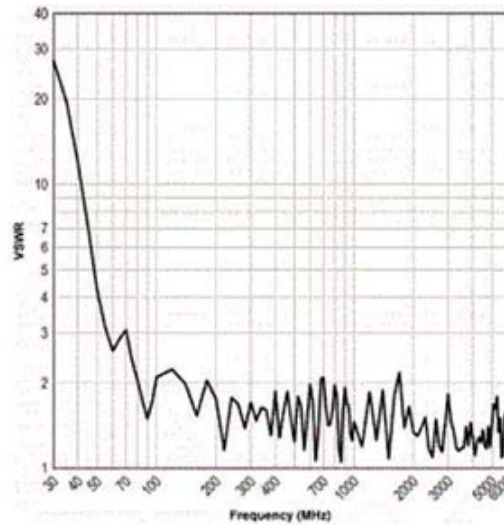
- Antenna Assembly
- Rear "Stinger" Mount
- Drilled Mounting Bracket Accepts ETS-Lindgren or Other Tripod Mounts with 1/4 in x 20 Threads
- Individually Calibrated at 10 m H Pol. per ANSI C63.5
- Actual Factors and a Signed Certificate of Calibration Conformance are Included in Manual
- Manual

Product Charts

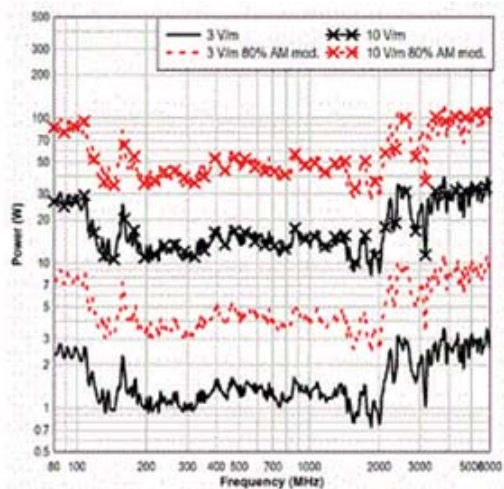
**3142E BiConiLog Antenna
Typical Antenna Factors
and Gain**



**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
Required for each of the
16 Points on the Grid

