

3142E BiConiLog Antenna



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

Product 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

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)

Electrical Specifications

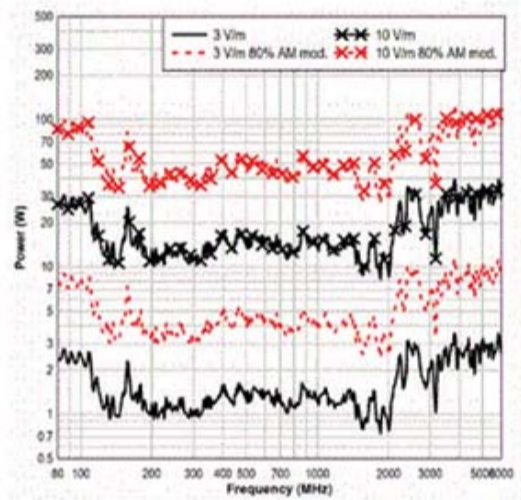
- Frequency Minimum: 30 MHz
- Frequency Maximum: 6 GHz
- Impedance (Nominal): 50
- VSWR Ratio (AVG): 2:1
- Connectors: Type N (F)
- Pattern Type: Directional
- Polarization: Linear

Product Configuration

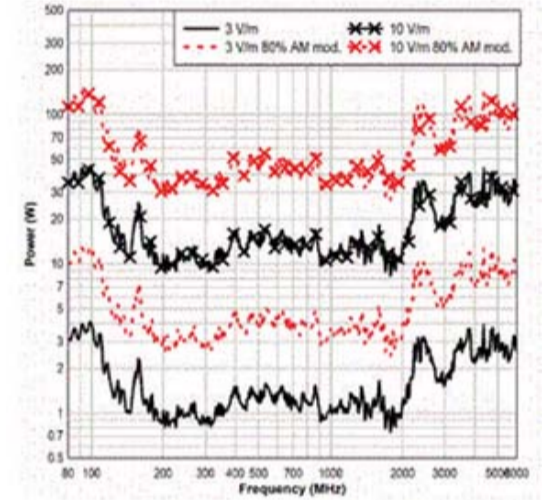
- Antenna Assembly
- Rear "Stinger" Mount
- Drilled Mounting Bracket Accepts ETS-Lindgren or Other Tripod Mounts with 1/4 in x 20 Threads
- Individually Calibrated at 10 m H Pol. per ANSI C63.5, cross-Pol per CISPR 16-4: 2010
- Actual Factors and a Signed Certificate of Calibration Conformance are Included in Manual
- Manual

Charts

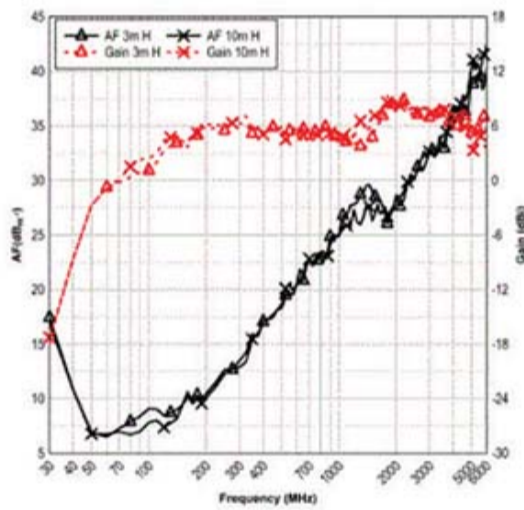
3142E BiConiLog Antenna Power Requirements in FACT™ 3 Chamber with Ferrite Floor Horizontal Polarization Average of the Power Required for each of the 16 Points on the Grid



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



3142E BiConiLog Antenna Typical Antenna Factors and Gain



3142E BiConiLog Antenna Typical VSWR

