ETS-LINDGREN
An ESCO Technologies Company

EMC Antennas

BiConiLog™

Model 3142E

Features:

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

ETS-Lindgren's Model 3142E BiConiLog Antenna

THE MODEL 3142E 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 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.

FEATURES

Frequency Range

The Model 3142E 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" 20 thread screw or rear stinger mount.

Individually Calibrated

The 3142E is individually calibrated at 10m H pol. per ANSI C63.5.

STANDARD CONFIGURATION

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

OPTIONS

- ETS-Lindgren offers several non-metallic, non-reflective tripods. For easy horizontal and vertical polarization changes, the 7-TR tripod is recommended.

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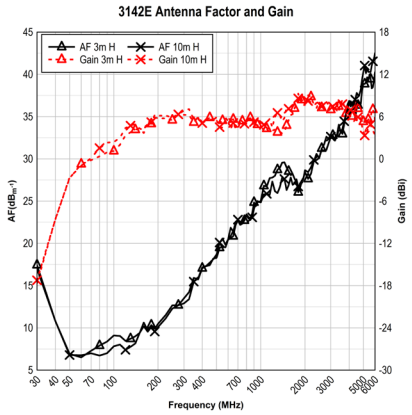
Electrical Specifications

MODEL	FREQUENCY RANGE	VSWR RATIO (AVG)	MAXIMUM CONTINUOUS POWER	PEAK POWER	IMPEDANCE (NOMINAL)	CONNECTORS
3142E	30 MHz – 60 MHz 60 MHz – 600 MHz 600 MHz – 1 GHz 1 GHz – 6 GHz	2:1	500 W 1 kW 500 W 200 W	800 W 1.5 kW 800 W 300 W	50 Ω	Type N Female (1)

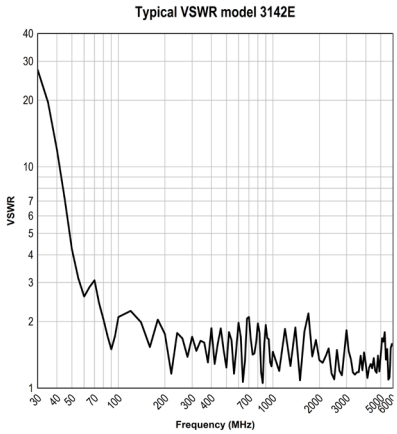
Physical Specifications

MODEL	WIDTH	DEPTH	HEIGHT	WEIGHT
3142E	133.9 cm 52.7 in	139.2 cm 54.8 in	76.2 cm 30.0 in	5.7 kg 12.5 lb

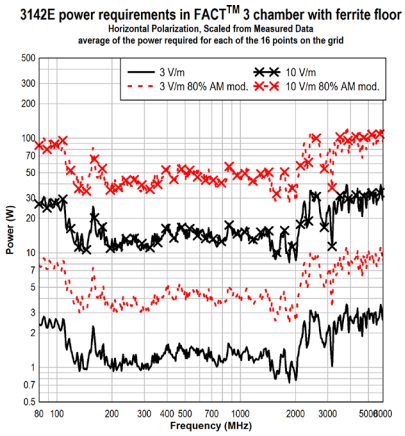
Typical Antenna Factors and Gain



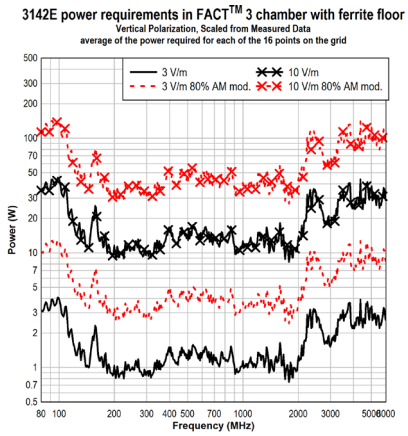
Typical VSWR



Typical Avg. Power Required in Horizontal Polarization



Typical Avg. Power Required in Vertical Polarization



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