

Features:

- 26 MHz - 3 GHz Frequency Range
- Emissions Testing:
 - ANSI C63.4
 - FCC-15 and FCC-18
 - EN 55022
- Individually Calibrated:
 - 1m per SAE ARP 958
 - 3m and 10m per ANSI C63.5
- Avg. 2:1 VSWR Above 80 MHz
- Fits Compact Chambers
- Tough Powder Coat Finish
- Two Year Warranty



ETS-Lindgren's EMCO Model 3142C BiConiLog Antenna

ETS-Lindgren's EMCO Model 3142C BiConiLog is a hybrid antenna that combines innovative design, compact size, and excellent performance. This antenna enables users to measure a frequency range of 26 MHz to 3.0 GHz in one sweep, negating the need for multiple antennas and time-consuming equipment setup. This single sweep capability removes the need for multiple antennas and additional equipment, which improves accuracy and saves time and money.

This BiConiLog is designed as a dual-purpose antenna that can be used for both immunity and emission testing. From 26 MHz to 60 MHz, the Model 3142C antenna with optional end plates exhibits an average 5.5 dB gain improvement vs. typical hybrid antennas. At some frequencies, a 10 dB gain improvement is achieved.

This model replaces the EMCO Model 3142 and 3142B, and when used with optional end plates, is identical to the former Model 3141. The optional end plates are available to improve gain for immunity testing. These plates can easily be attached and detached by hand using screw knobs. Individual antenna calibration data- without the end plates attached- is provided for emission testing.

Standard Configuration

- Antenna
- Individually calibrated:
 - 1m per SAE ARP 958
 - 3m and 10m per ANSI C63.5
- Actual antenna factors and a signed Certificate of Calibration Conformance included in manual
- Manual

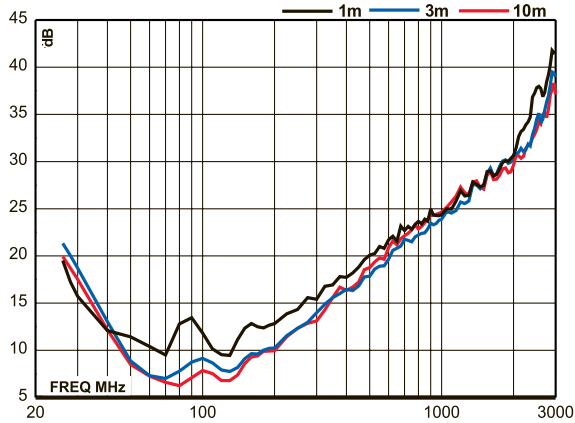
Options

- Optional T Bow-Tie end plates (shown below)
- ETS-Lindgren offers several non-metallic, non-reflective tripods for use at EMC test sites. For easy horizontal and vertical polarization changes, the Model 7-TR tripod is recommended

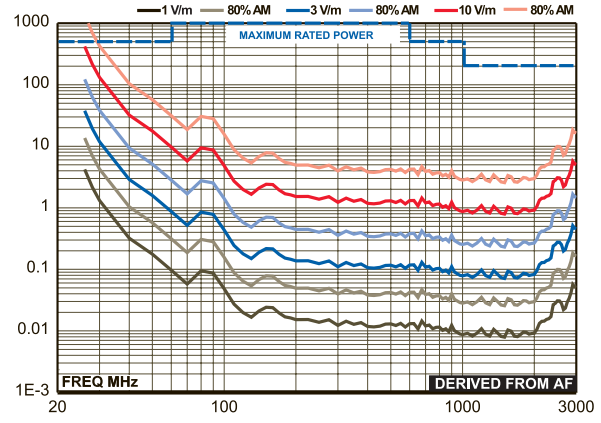


ETS-Lindgren's EMCO Model 3142C BiConiLog Antenna with Optional End Plates

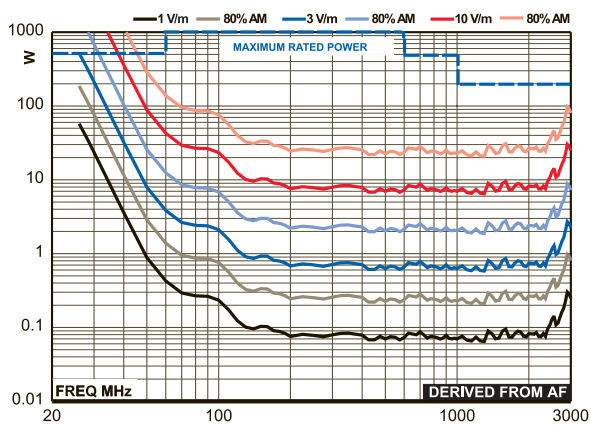
Model 3142C Antenna Factor (without End Plates)



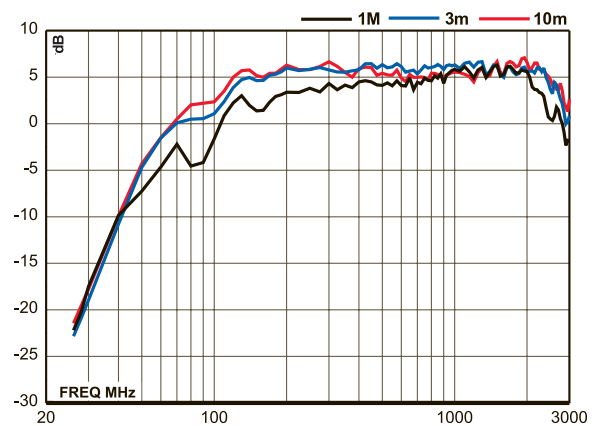
Model 3142C Forward Power 1m with End Plates



Model 3142C Forward Power 3m with End Plates



Model 3142C Gain with End Plates



Electrical Specifications

| MODEL | FREQUENCY RANGE | VSWR RATIO (AVG) | MAXIMUM CONTINUOUS POWER | IMPEDANCE (NOMINAL) | CONNECTORS |
|-------|------------------|------------------|--------------------------|---------------------|-------------------|
| 3142C | 26 MHz – 60 MHz | 2:1 | 500 W | 50Ω | Type N female (1) |
| | 60 MHz – 600 MHz | 2:1 | 1 kW | 50Ω | Type N female (1) |
| | 600 MHz – 1 GHz | 2:1 | 500 W | 50Ω | Type N female (1) |
| | 1 GHz – 3 GHz | 2:1 | 200 W | 50Ω | Type N female (1) |

Physical Specifications

| MODEL | WIDTH | DEPTH | HEIGHT | WEIGHT |
|--------------------------------------|---------------------|---------------------|--------------------|-------------------|
| 3142C without optional end plates | 135.0 cm 53.1 in | 124.5 cm 49.0 in | 75.0 cm 29.5 in | 4.0 kg 8.8 lb |
| 3142C with optional end plates | 137.4 cm 54.1 in | 132.1 cm 52.0 in | 76.2 cm 30.0 in | 6.7 kg 14.7 lb |