

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



ETS-Lindgren's EMCO Model 3142C BiConiLog Antenna

Options

- Optional TBow-Tie end plates (shown below)
- ETS-Lindgren offersseveral 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

	FINLAND		
.512.531.6400	Tel +358.	2	
.512.531.6500	Fax +358.	2	

USA:

Tel +1

Fax +1

: UK: 2.8383.300 Tel + 2.8651.233 Fax +

 UK:
 FRANCE:

 Tel +44.(0)1438.730700
 Tel +33.1.

 Fax +44.(0)1438.730751
 Fax +33.1.

FRANCE: Tel +33.1.48.65.34.03 Fax +33.1.48.65.43.69 CHINA: Tel +8610.8275.5086 Fax +8610.8275.5537 JAPAN: Tel +81.3.3813.7100

Fax +81.3.3813.8068

ONLINE:

info@ets-lindgren.com www.ets-lindgren.com







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



USA: FINLAND: UK: Tel +44.(0)1438.730700 Tel +1.512.531.6400 Tel +358.2.8383.300 Fax +1.512.531.6500 Fax +358.2.8651.233 Fax +44.(0)1438.730751

FRANCE: Tel +33.1.48.65.34.03 Fax +33.1.48.65.43.69 CHINA: Tel +8610.8275.5086 Fax +8610.8275.5537

JAPAN: Tel +81.3.3813.7100 Fax +81.3.3813.8068

ONLINE: info@ets-lindgren.com

www.ets-lindgren.com

Information presented is subject to change as product enhancements are made. Contact ETS-Lindgren Sales Department for current specifications.

7/03 - 1.5K S © 2003 ETS-Lindgren REV A





Electrical Specifications

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

Physical Specifications

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

USA: UK: FRANCE: CHINA: JAPAN: ONLINE: FINLAND: Tel +1.512.531.6400 Tel +358.2.8383.300 Tel +44.(0)1438.730700 Tel +33.1.48.65.34.03 Tel +8610.8275.5086 Tel +81.3.3813.7100 info@ets-lindgren.com Fax +1.512.531.6500 Fax +358.2.8651.233 Fax +44.(0)1438.730751 Fax +33.1.48.65.43.69 Fax +81.3.3813.8068 www.ets-lindgren.com Fax +8610.8275.5537