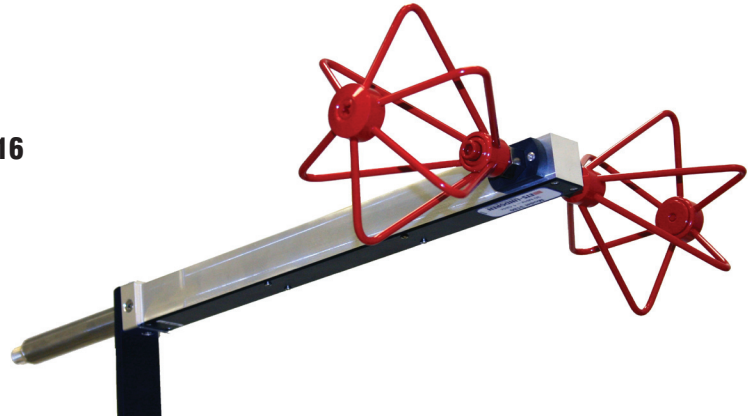


EMC Antennas
Broadband
Mini-Bicon Antenna
Model 3180

FEATURES:

- **30 MHz - 1 GHz Frequency Range**
- **Omnidirectional Pattern Conforms with CISPR-16**
- **Ideal for:**
 - **Chamber Characterization**
 - **Broadband Spectrum Monitoring**
- **Flexible Mounting Systems**



ETS-Lindgren's Model 3180 Broadband Mini-Bicon Antenna

The ETS-Lindgren Model 3180 Broadband Mini-Bicon Antenna has been designed for optimal performance across the frequency range of 30 MHz - 1 GHz. The Model 3180's uniquely designed elements provide a omni-directional pattern, without the main radiation beam splitting into two lobes in the elevation cut.

The Model 3180 is ideal for the free space NSA (FSNSA) test for fully anechoic rooms. Its small size allows for harmonic monitoring when testing per the IEC 61000-4-3.

FEATURES

Frequency Range

The Model 3180 covers the traditional frequency range EMC measurements. Additionally, the Model 3180 covers all of the VHF and part

of the UHF bands, making it ideal for spectrum monitoring of FM, TV and some cellular phones.

Radiation Pattern

The Model 3180 has been designed to have a radiation pattern that meets the requirement of CISPR-16. The elements have been optimized to avoid any splitting of the main radiation beam in the elevation cut.

Flexible Mounting System

The Model 3180 antenna includes both an EMCO block mount and a rear "stinger" mount.

APPLICATIONS

- Fully Anechoic Room Testing
- Harmonic Level Measurements
- Spectrum Monitoring

STANDARD CONFIGURATION

- Antenna
- Manual
- Individually Calibrated

OPTIONS

- Conical elements also available as solid elements. Performance is unaffected. These elements are 2.54 cm (1 in.) shorter, 1.27 cm (.5 in.) inch wider, and slightly lighter than the standard conical elements.



ETS-Lindgren's Model 3180 Broadband Mini-Bicon Antenna with Optional Solid Elements

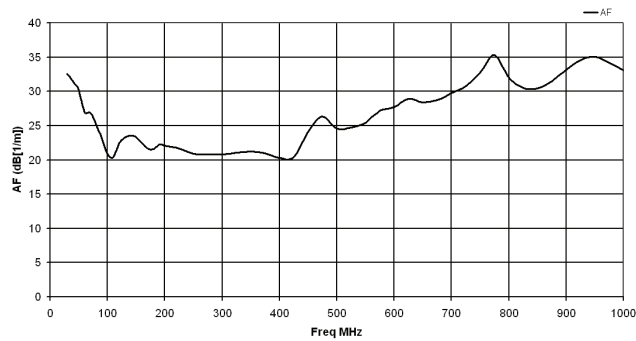
Electrical Specifications

| MODEL | FREQUENCY RANGE | VSWR RATIO (AVG) | MAXIMUM CONTINUOUS POWER | IMPEDANCE (NOMINAL) | CONNECTORS |
|-------|-----------------|------------------|--------------------------|---------------------|------------|
| 3180 | 30 MHz - 1 GHz | <5:1 | 50 w | 50 Ω | Type N (F) |

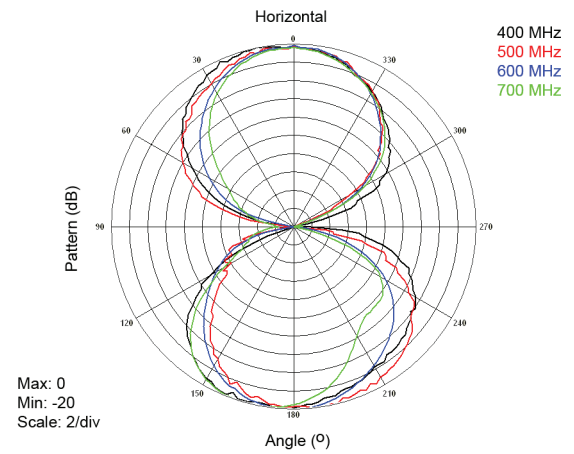
Physical Specifications

| MODEL | LENGTH | WIDTH | HEIGHT |
|-------|---------------------|--------------------|----------------------|
| 3180 | 53.34 cm 21.0 in | 15.24 cm 6.0 in | 33.63 cm 13.24 in |

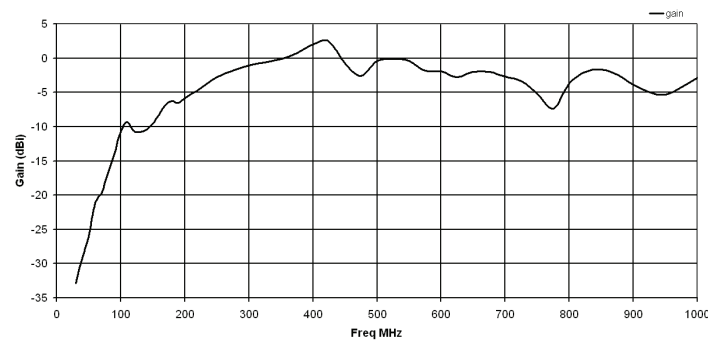
Model 3180 Antenna Factor Typical Performance



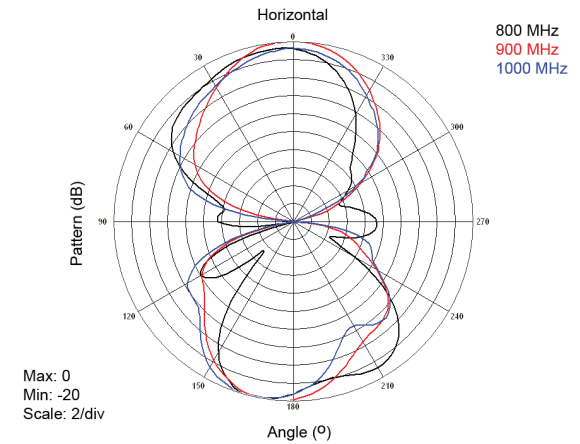
Model 3180 Typical Measured Pattern



Model 3180 Gain Typical Performance



Model 3180 Typical Measured Pattern



Model 3180 VSWR Typical Performance

