

EMC Antennas
Broadband
Mini-Bicon Antenna

Model 3183

FEATURES:

- **1 GHz - 18 GHz Frequency Range**
- **Radiation Pattern Conforms to CISPR 16 Specifications**
- **Ideal for:**
 - Chamber Characterization per CISPR 16
 - Harmonic Measurements per IEC 61000-4-3



ETS-Lindgren's Model 3183 Mini-Bicon Antenna

THE ETS-LINDGREN MODEL 3183 BROADBAND MINI-BICON ANTENNA

was designed for CISPR 16 chamber characterization. The antenna has a broadband frequency range of 1 GHz - 18 GHz. Its omnidirectional pattern conforms to CISPR 16 specifications.

FEATURES

Frequency Range

The Model 3183 is designed to have the lowest possible VSWR across its range of operation. The antenna exhibits an average 2:1 VSWR.

Radiation Pattern

The radiation pattern of the Model 3183 is omnidirectional in

the H-plane. This means the antenna can receive signals from every direction around its axis.

CISPR 16 Conformance

The radiation pattern closely conforms to the CISPR 16 requirements for chamber validation. Because of its small size, the antenna can also be used for amplifier harmonic measurements when performing tests per the IEC 61000-4-3.

Spectrum Monitoring

The Model 3183 can be used for EM Field surveying and spectrum monitoring. The low weight design allows use as a field surveying tool, in conjunction with a portable spectrum analyzer.

STANDARD CONFIGURATION

- Antenna
- Antenna Mount for Tripod
- Manual
- Individually Calibrated at 1 m per SAE ARP 958 at our A2LA accredited lab. Actual Antenna Factors and a Signed Certificate of Calibration Conformance Included with Manual

OPTIONAL CONFIGURATION

- ETS-Lindgren offers several non-metallic, non-reflective tripods

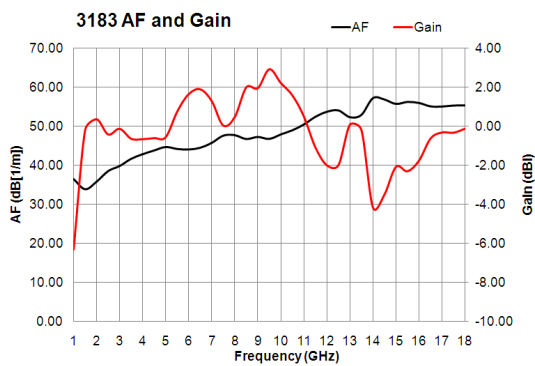
Electrical Specifications

MODEL	FREQUENCY RANGE	VSWR RATIO (AVG)	MAXIMUM CONTINUOUS POWER	IMPEDANCE (NOMINAL)	CONNECTORS
3183	1 GHz - 18 GHz	2:1	50 watts @ 1 GHz 25 watts @ 18 GHz	50 Ω	SMA (F)

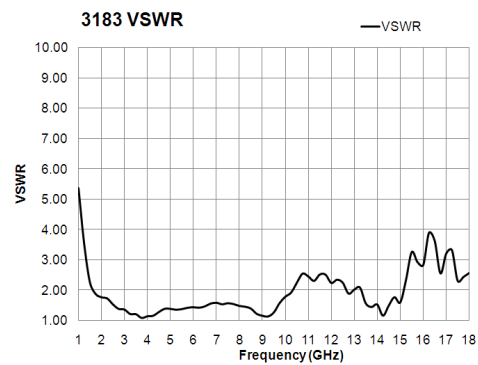
Physical Specifications

MODEL	LENGTH	WIDTH	STINGER LENGTH	WEIGHT
3183	36.2 cm 14.25 in	7.0 cm 2.76 in	17.8 cm 7.0 in	.5 kg 1.1 lbs

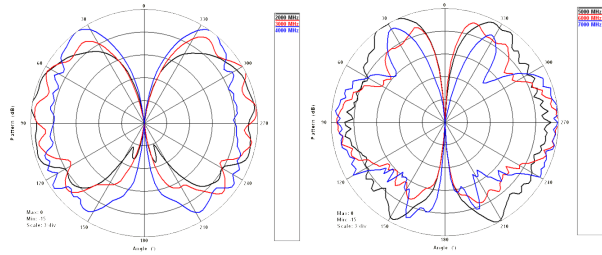
Gain/Antenna Factor Typical Performance



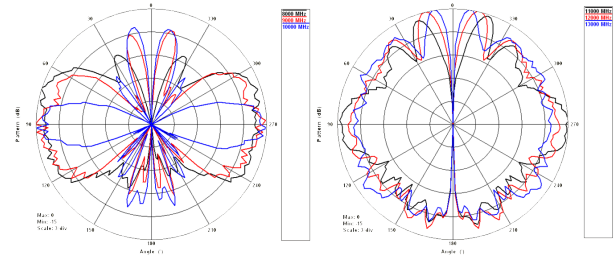
VSWR Typical Performance



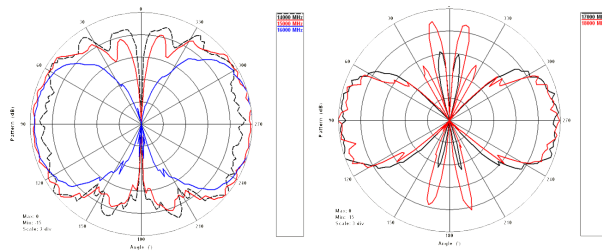
Model 3183 Typical Elevation Pattern 2 GHz - 7 GHz



Model 3183 Typical Elevation Pattern 8 GHz - 13 GHz



Model 3183 Typical Elevation Pattern 14 GHz - 18 GHz



Model 3183 Typical Azimuth Pattern 2 GHz - 18 GHz

