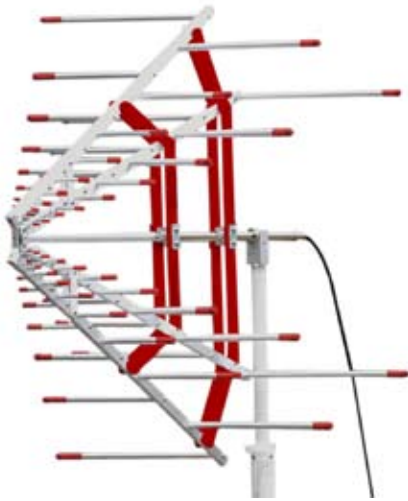


Double Stacked Log.-Periodic Antenna – AXL-200, 200 MHz – 2.5 GHz

for immunity tests acc. to automotive standards



Description

The AXL-200 has especially been designed for the generation of high field strength levels acc. to automotive immunity standards. The small dimensions of the antenna does also allow to keep the min. required distance of 25cm to the floor, when testing in vertical polarization.

From the mechanical design it's a double-stacked logarithmic periodic antenna, consisting of two excellent ordinary log.-periodic structures. This design guarantees a high and flat gain of 9-10dBi over a large bandwidth and a low SWR.

The stacked design helps to focus the directional pattern of the H-plane somewhat, resulting in a typical gain improvement of ca. 2 dB compared to an ordinary LP antenna. This is especially important for immunity testing, where a maximum field strength and a good field uniformity is required. The beamwidth in the E-plane and the H-plane are nearly identical, providing an optimized illumination of the EUT with minimized ground reflection influence. Further the AXL-200 has an excellent cross-polar rejection.

Technical specifications

Type:	AXL-200
Frequency range:	200 MHz to 2.5 GHz
Max. input power	2 kW (intermitt.)
(N-connector):	1 kW (cont.)
Max. input power	3 kW (intermitt.)
(7 / 16-connector):	2 kW (cont.)
Nominal impedance:	50 Ohm
Isotropic gain:	9 ... 10 +/- 1 dBi
Antenna factor:	8 ... 24 dB/m
Standing wave ratio SWR typ.:	< 1.5
Front to back ratio:	> 16 dB
Cross polarization:	> 30 dB (200 MHz ... 1 GHz)
3 dB beamwidth typ. (E-Plane):	64° - 53°
3 dB beamwidth typ. (H-Plane):	63° - 44°
Dimensions (W x L x D) in mm:	930 x 890 x 940
Weight:	4.6 kg
Fixation:	∅ 22 mm tube
Use:	Radiated immunity tests and Emission measurements acc. to automotive standards

Measurements

