

# Broadband Antenna ALX-4000 / ALX-4000E / ALX-8000E

for emission measurements and immunity tests

## Description

The ALX-4000 is an ultra-broadband antenna for emission measurements and immunity tests according to nearly all relevant international standards in the frequency range from 25 MHz up to 4 GHz. With regard to its mechanical structure it is a linear polarized logarithmic periodic broadband antenna for the higher frequency range, combined with a 4:1 broadband dipole (aluminum) for the low frequency range. This kind of ultra-broadband antenna allows performance of EMC test in one run, without time consuming antenna changes.



The ALX-4000E is an especially optimized version for emission measurements. It offers lower antenna factors and improved VSWR. Additionally it can be used for immunity tests which require an input power of less than 100 W cw (200 W intermitt.).

The ALX-8000E has an extended frequency range up to 8 GHz.

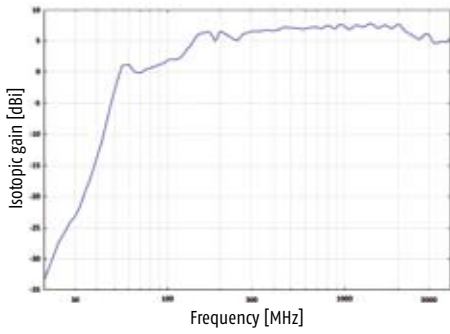
All antennas are supplied with antenna factors for 3.0 m and 10.0 m measuring distance (1.0 m on request).

Technical specifications	ALX-4000	ALX-4000E	ALX-8000E
Frequency range	25 MHz to 4 GHz		25 MHz to 8 GHz
Max. input power	100 MHz - 900 W 500 MHz - 300 W 1000 MHz - 210 W 2000 MHz - 140 W 3000 MHz - 100 W	200 W (intermitt.) 100 W (cont.)	
Nominal impedance	50 Ω		
Connector	type N female		
Isotropic gain (LP-Section)	6.4 ± 1.2 dBi		
Antenna factor	4 ... 37 dB/m	7 ... 34 dB/m	7 ... 43 dB/m
Standing wave ratio SWR typ.	< 1.5		
Front to back ratio	20 dB (f > 150 MHz)		
Cross polarization	>20 dB (30 MHz...1 GHz)		
3 dB beamwidth typ. (E-Plane)	45°-65° (f > 150 MHz) ≈ 78° (f < 150 MHz)		
3 dB beamwidth typ. (H-Plane)	90°-120° (f > 150 MHz)		
Dimensions (W x L x D)	1500 x 930 (1218) x 620 mm	1500 x 910 (1218) x 620 mm	1500 x 920 (1253) x 620 mm
Weight	3.1 kg		
Fixation (indexing ring)	22 mm tube		
Use	Emission measurements Radiated immunity tests		

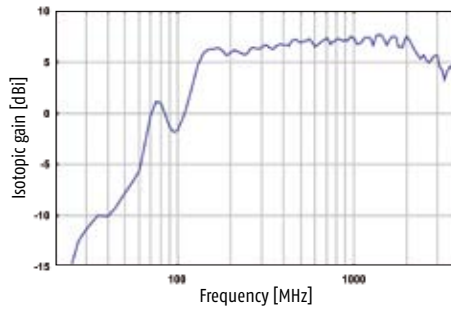
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Measurements of ALX-4000



Measurements of ALX-4000E



Measurements of ALX-8000E

