



AKG/8

Circular Polarization FM Omnidirectional Antenna



MOUNTING INSTRUCTIONS

This antenna, made of stainless steel, is particularly recommended for low and medium Output Power Transmitters. The AKG/8 antenna is factory tuned at any channel within 87.5-108 Mhz. It can be easily retuned on any new frequency inside the band 87.5-108MHz, with the simple aid of suitable instrumentation

CONNECTOR	N
MAX POWER	500W
VSWR	≤ 1.4
POLARIZATION	Circular
GAIN	minus 1.5dB dB (referred to half-wave dipole)
H PLANE	270°
V PLANE	330°
LIGHTNING PROTECTION	All metal parts DC grounded
MAX WIND VELOCITY	220Km/h.
WIND LOAD	25Kgs. (with speed at 150KM/h)
WIND SURFACE	0.09 sqm
MATERIALS	
Internal Parts	Silver-plated Brass and PTFE
External Parts	Stainless Steel
MOUNTING	from 60 to 120mms. ø
WEIGHT	4Kgs.
DIMENSIONS	580x350x850 m ms.
PACKING	740x460x330 m ms.

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BAYS	DB	ANTENNA	WEIGHT	WIND VEL.	WIND LOAD
	GAIN	Vert. dimensions	Kg	Km/h	Kg.
1	-1.5	1,8 mt	4	160	4
2	1.5	4,3 mt	8		
4	4.5	9,3 mt	16		
6	6.0	14,3 mt	24		
8	7.5	19,3 mt	32		

SUGGESTED MAST SECTION

Is suggested install this Antenna over a small pole or guyed mast of a section less than 110mm.

DISTANCE ESTIMATION BETWEEN FM ANTENNA BAYS

Wave Length = $\lambda = 300 : f(\text{MHz})$

Distance between antenna bays (any antenna types) = **d**

d (suggested) = $\lambda \times 0.85$

88MHz $\Rightarrow \lambda = 300 : 88 = 3.41 \text{ mt} \Rightarrow d = 3.41 \times 0.85 = 2.9 \text{ mt}$

98MHz $\Rightarrow \lambda = 300 : 98 = 3.06 \text{ mt} \Rightarrow d = 3.06 \times 0.85 = 2.6 \text{ mt}$

108MHz $\Rightarrow \lambda = 300 : 108 = 2.78 \text{ mt} \Rightarrow d = 2.78 \times 0.85 = 2.36 \text{ mt}$

Distance **d** suggested 2.6mt even if working frequency is Mid FM Band

**NARROW BAND ANTENNA
TYPICAL RETURN LOSS**