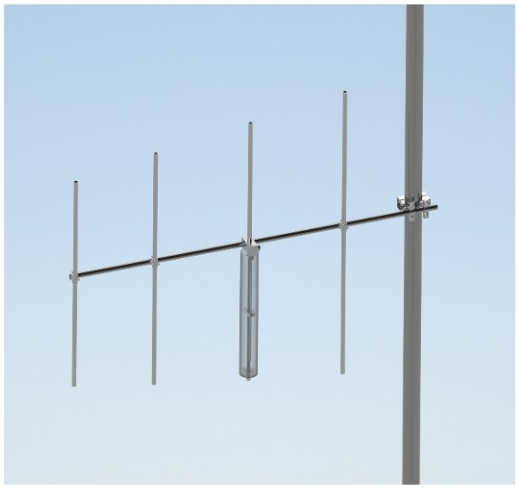
Models:

AJ4E
AJ4EBI
AJ4E/INOX
AJ4E/IT

- High power verson H.P
- FM band 87.5-108MHz tunable
- Suitable for VHF, Band I and OIRT band on request
- Gamma match tuned
- Vertical or horizontal polariztion
- Light- low cost- desmountable



RADOME OPTIONAL VERSION

STANDARD VERSION

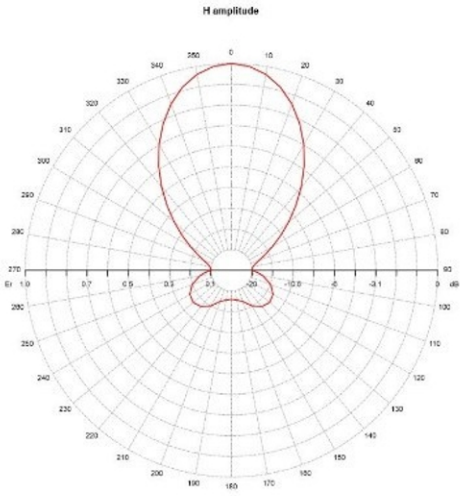
ELECTRICAL DATA

Frequency range	87.5 – 108 mhz.
Impedance 13 kg	50 Ohm
Connectors	N or 7/16'' female or 7/8'' EIA
Max Power	650W (N)-1300 W (7/16''- H.P version)
VSWR	≤ 1.1:1in the opening channel
Polarization	Vertical or horizontal
Gain	8dB (referred to half wave dipole)
Half power	E plane +_25° H plane +_30°
Lightning protection	No DC grounded

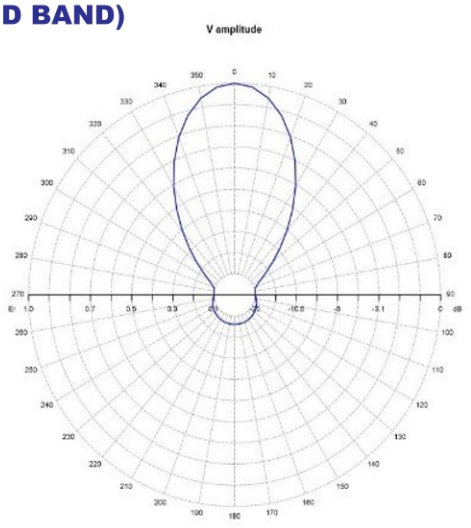
MECHANICAL DATA

Dimensions	According to the working frequency (1500(H)x860(L)x100(W) mm at 98Mhz)
Weight	According to the working frequency
Wind surface	0.18m2 (at 98 Mhz)
Wind load	23.3 Kg (wind speed at 160Km/h)
Max wind velocity	180Km/h (AJ4E/IT model)
Materials	AJ4E: aluminium elements and boom AJ4EBI: aluminuim elements and inox boom AJ4E/INOX: inox elements and boom AJ4E/IT: -inox elements and boom tig welded Insulator. teflon Radome: PE (optional)
Icing protection	Feed point radome
Radome	Color transparent (optional)
Mounting	With special pipe clamps 50÷110 mm diameter

RADIATION PATTERN (MID BAND)
DIMENSIONS



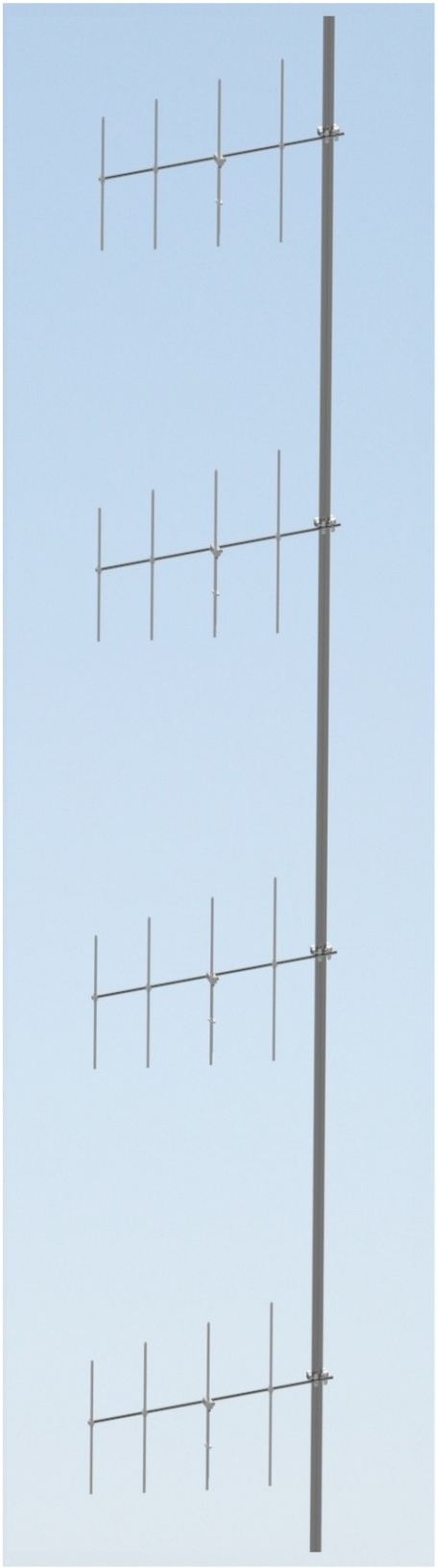
H PLANE



E PLANE

Radiations systems with AJ4E antenna

Collinears systems



ELECTRICAL DATA

Frequency range	87.5÷108 MHz
Impedance	50 Ohm
Connector	EIA flange according to system power rating
VSWR	≤ 1.1:1 Max
Polarization	Vertical
Gain	According to requirement
Horizontal pattern	Any type according to the customer requirements
Vertical pattern	Null fill, beam tilt and special requirements on demand
Other facilities	The antenna system can be supplied in split feed with two equal half antennas. Each half can accept full power

MECHANICAL DATA

Height of array	Subject to number of bays (refer to table)
Total net weight	According to working frequency
Wind load	Refer to table (at 98 Mhz)
Pressurizzable	No
Radome colour	White (optional)
Mounting hardware	Hot dip galvanized steel clamps (standard)
Shipping	As required

TECHNICAL DATA

Number of bays	Dipole per bay	Gain[1]		Weight[2] kg	Antenna height L m	Wind load (v=160 km/h) kg
		dB	times			
1	1	8	6.3	-	1.5	23.3
2	1	11	12.6	-	4.1	46.6
4	1	14	25.2	-	9.3	93.2
6	1	15.8	37.8	-	14.5	139.8
8	1	17	50.4	-	19.7	186.4

[1] *referred to a half wave dipole. Attenuation of connecting cables not taken into account.*
[2] *without mounting hardware.*

- *Gain is provided for vertical polarisation.*
- *If the antenna is side mounted, the supporting structure will have a slight effect on the radiation pattern and VSWR.*
- *Vertical tower space, wind load and weight numbers given are typical. Actual values vary with the specific installation. Contact us for more details of your installation.*
- *Gain will be reduced if null fill, beam tilt or special wavelength spacing is provided.*
- *Antenna radiation aperture is the distance from the centre of the top bay to the centre of the bottom bay.*
- *Five ft(1.6mt) of pipe required above the top bay and below the bottom bay for to protect from pattern interference by other antennas.*
- *Antenna wind load is calculated for 100 Mph (160Km/h) per EIA-222-C standard.*