

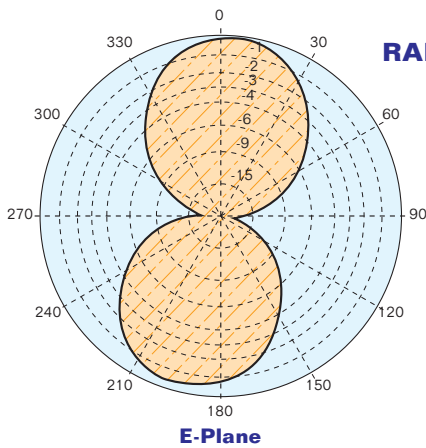
Model AJ1F – AJ1F 7/8

- **Band II dipole**
- **Broadband 87.5÷108 MHz**
- **1,5 dB gain**
- **Vertical polarization**
- **Omni directional pattern**
- **Stainless steel AISI 304**

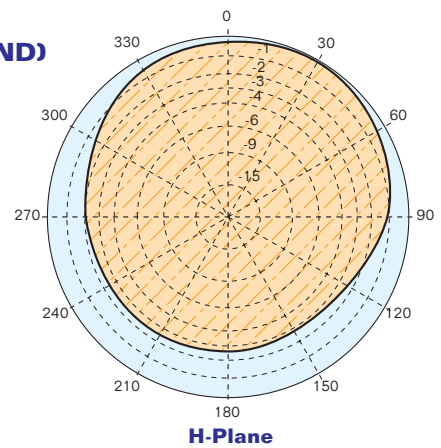


ELECTRICAL DATA	
Frequency range	87.5÷108 MHz
Impedance	50 Ohm
Connectors	N or 7/16" female or 7/8" EIA
Max Power	800W (N) – 2KW (7/16") – 3.5KW (7/8" EIA)
VSWR	≤ 1.35:1 Average
Polarization	Vertical
Gain	See table (referred to half-wave dipole)
Pattern	Omni directional ± 1.5 dB in free space Omni directional ± 3 dB with 100mm dia. pole
Lightning protection	All metal parts DC grounded

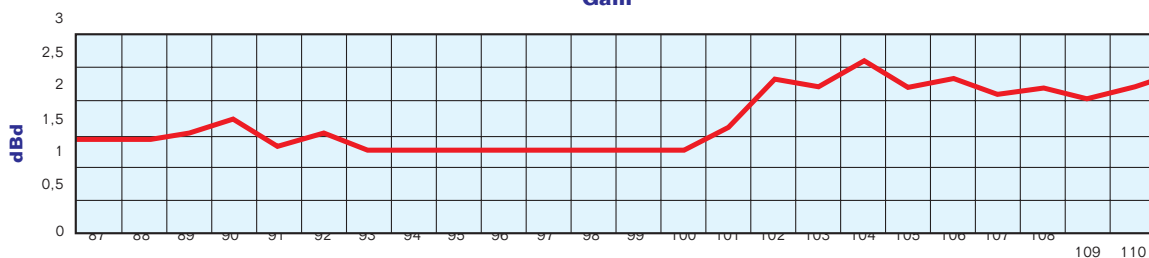
MECHANICAL DATA	
Dimensions	1360x1100x180 mm
Weight	9 kg with hardware mounting
Wind surface	0.06 m ²
Wind load	10.1 kg (wind speed at 160 km/h – without radome)
Max wind velocity	220 km/h.
Materials	External parts: stainless steel Internal parts: passivated aluminium Radome: fiberglass (option)
Icing protection	Feed point radome (optional)
Radome	Optional
Mounting	With special pipe clamps 50+110 mm dia.



RADIATION PATTERN (MID BAND)



Gain

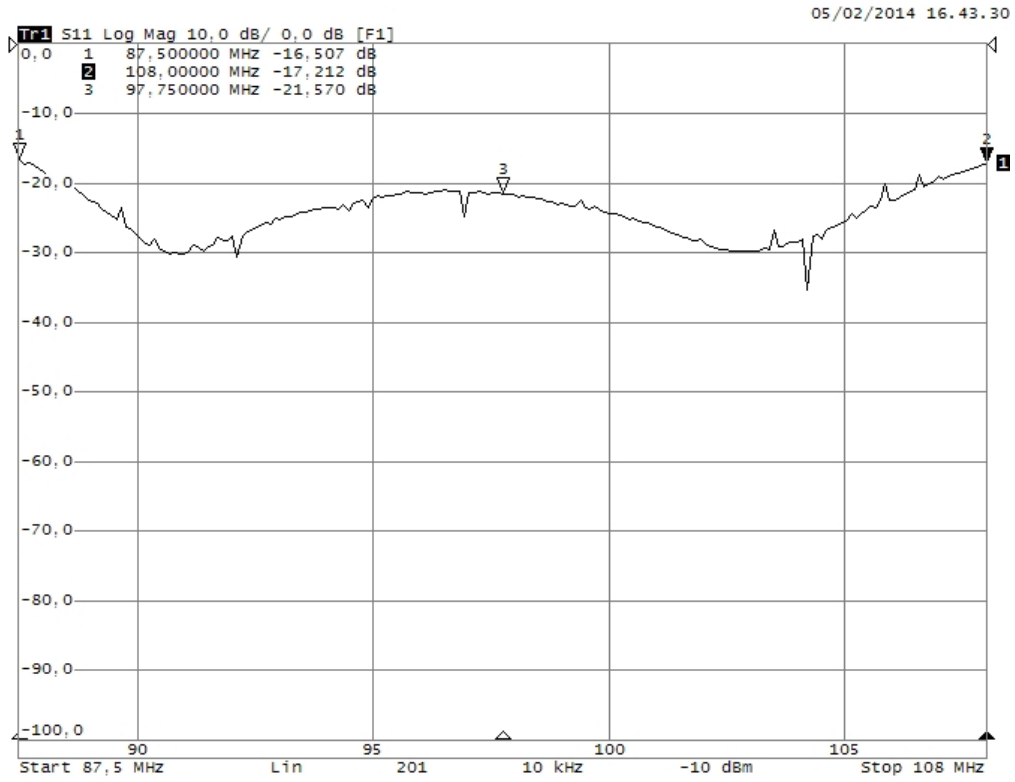


Freq. in MHz

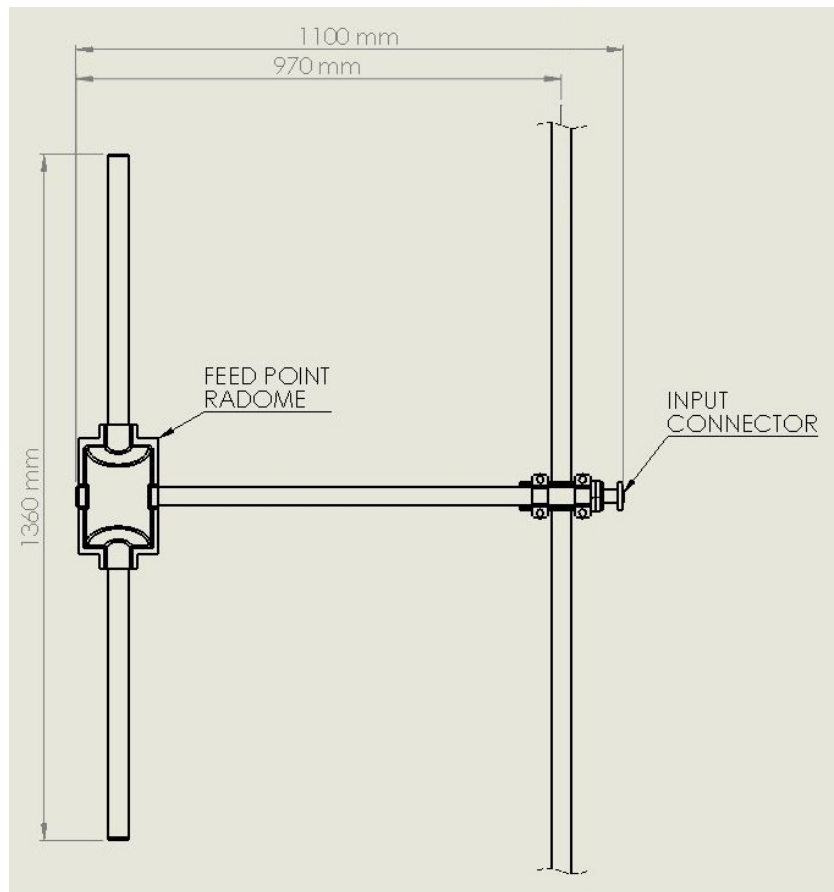
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Model AJ1F - AJ1F 7/8

RETURN LOSS



DIMENSIONS



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Model AJ1F – AJ1F 7/8

Radiations systems with AJ1F antenna Omni-directional pattern

ELECTRICAL DATA	
Frequency range	87.5+108 MHz
Impedance	50 Ohm
Connector	EIA flange according to system power rating
VSWR	≤ 1.35:1 Max
Polarization	Vertical
Gain	According to requirement
Horizontal pattern	Any type according to requirements
Vertical pattern	Null fill, beam tilt and special requirements to order
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	Refer to table
Wind load	Refer to table
Pressurizable	Yes (on request)
Radome	Optional
Mounting hardware	Hot dip galvanized steel clamps
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	COLLINEARS SYSTEMS ³			
		dB	times				2 KW	4 KW	6 KW	10 KW
1	1	1.5	1.4	9	1.4	10.1	AJ1F	AJ1F	-	-
2	1	4.5	2.8	18	4.0	20.2	AJ1FX22	AJ1FX24	AJ1FX26	-
4	1	7.5	5.6	36	9.2	40.4	AJ1FX42	AJ1FX44	AJ1FX46	AJ1FX410
6	1	9.3	8.4	54	14.5	60.6	AJ1FX62	AJ1FX64	-	AJ1FX610
8	1	10.5	11.3	72	20.0	80.8	AJ1FX82	AJ1FX84	AJ1FX86	AJ1FX810

¹ Referred to a half wave dipole. Attenuation of connecting cables not taken into account.

² Without mounting hardware.

³ The systems comprised: antennas, cables and splitter – for more details to see catalog – different version on request.

- Gain is provided for vertical polarization.
- When antenna is pole mounted on the top a tower the horizontally polarized radiation pattern is omni - directional.
- 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(1.6m) 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.

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