Model: ACP1HP

- **Band II dipole**
- **Broadband 87.5÷108 MHz**
- **Circular polarization**
- **Stainless steel AISI 304**
- **Pressurizzable on request**

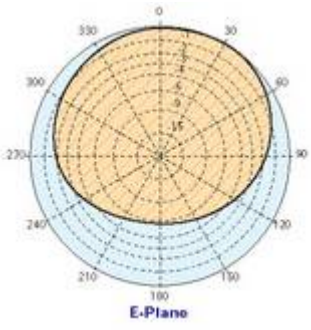
ELECTRICAL DATA

Frequency range	87.5÷108 MHz
Impedance	50 Ohm
Connectors	1+5/8" – 7/8"
Max Power	7 KW *with 1+5/8" connector* 5 KW *with 7/8" connector*
VSWR	≤ 1.4:1
Polarization	Circular
Gain	Refer to table
Pattern:	Omnidirectional ± 1.5 dB in free space Omnidirectional ± 3 dB with 100 mm diameter pole
Lightning protection	All metal parts DC grounded

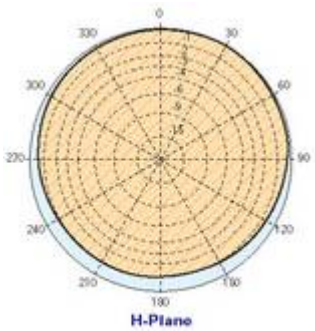
MECHANICAL DATA

Dimensions	1560x1150x1150 mm
Weight	22 Kg
Wind surface	0.4 m^2
Wind load	79 kg (side - wind speed at 160 km/h)
Max wind velocity	200 km/h.
Materials	External parts (stainless steel) Internal parts (aluminium treated) Radome: fibreglass (option)
Icing protection	Feed point radome (option)
Radome color	White (optional)
Mounting	With special pipe clamps 50 ÷ 110 mm dia.

RADIATION PATTERN (MID BAND)

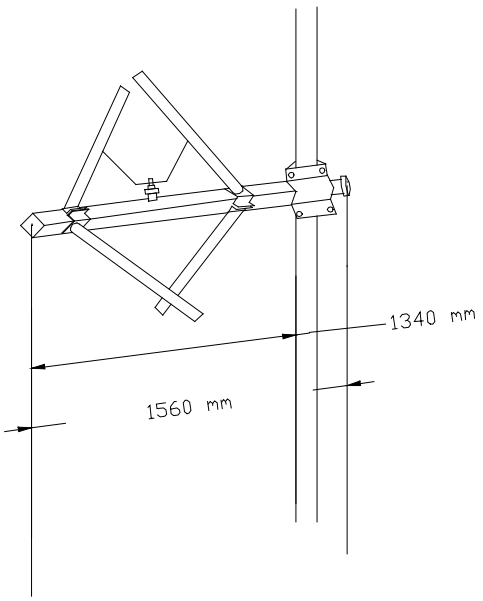


Vertical Component



Horizontal Component

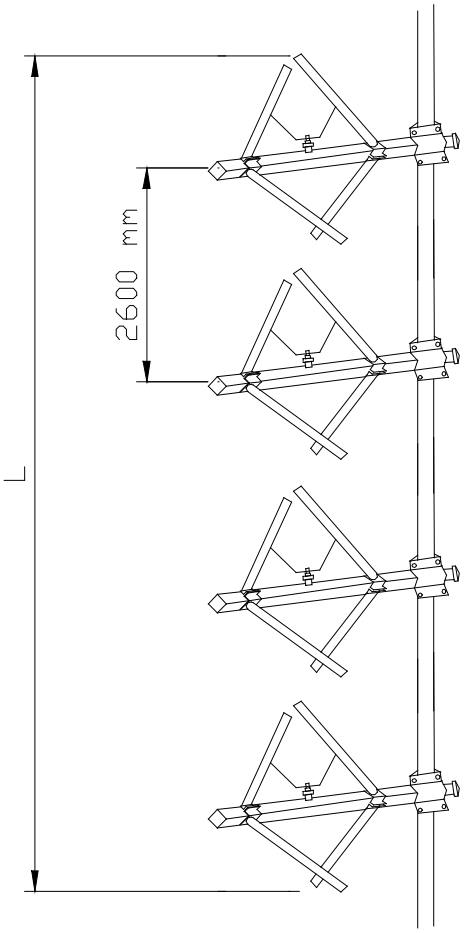
DIMENSIONS



"These specifications are subject to change without notice"

Radiations Systems with ACP1HP antenna

Omnidirectional patterns



ELECTRICAL DATA

Frequency range	87.5÷108 MHz
Impedance	50 Ohm
Connector	EIA flange according to system power rating
VSWR	≤ 1.4:1 Max
Polarization	Circular
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
Pressurizzable	Yes (on request)
Radome color	White (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
		dB	times			
2	1	1.5	1.4	44	3.8	158
3	1	3.2	2.1	66	6.4	237
4	1	4.5	2.8	88	9.0	316
6	1	6.2	4.2	132	14.2	474
8	1	7.5	5.6	176	19.4	632
12	1	9.2	8.4	264	29.8	948

[1] referred to a half wave dipole. Attenuation of connecting cables not taken into account total gain.
[2] without mounting hardware (cables and dividers are not included)

- Gain is provided for one 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(1.6mt) 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.