# TELECOMUNICAZIONIFERRARA RVRGROUP

## **Model: ACPOHP**

- **Band II**
- FM Band 87.5÷108 MHz
- **True Circular Polarization**
- **Tuned antenna**
- **Economical**
- **Digital Ready**
- **Stainless steel AISI 304**
- **Adjustable Fine-Matching Transformer (OPTION)**



ELECTRICAL DATA					
Frequency range	87.5÷108 MHz				
Impedance	50 Ohm				
Connectors	7/8" (3KW) or 7/16" (2KW)				
Max Power	3 KW				
VSWR ±100KHz	≤ 1.1:1				
Polarization	Right Circular				
Gain	-3.4 dB (referred to half wave dipole)				
Azimut Pattern Circularity:	Omnidirectional ± 1.5 dB in free space Omnidirectional ± 3 dB with 100 mm dia. pole				
Lightning protection	All metal parts DC grounded				

<b>MECHANICAL</b>	ECHANICAL DATA				
Dimensions	1200x375x775 (HxWxL) mm				
Net Weight	6 Kg without clamp 8,5 Kg with clamp				
Wind surface	0.072 m <sup>2</sup>				
Wind load	11.5 kg (wind speed at 160 km/h) Side				
Max wind velocity	220 km/h.				
Materials	External parts: stainless steel, plexiglas Internal parts: silver plated brass				
Mounting	With special pipe clamps 50 ÷ 110 mm dia.				

### Radiations systems with ACP0HP antenna - Collinear systems

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)				
Mounting hardware	Hot dip galvanized steel clamps				
Shipping	As required				

#### **RADIATION PATTERN FREE SPACE** (MID BAND)



**RVR GROUP** 

ELECTRICAL DATA				
Frequency range	87.5÷108 MHz			
Impedance	50 Ohm			
Connector	N female			
VSWR ± 100KHz	1.1:1 in the operating channel			
Polarization	Circular			
Gain	Refer to table			
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			

"These specifications are subject to change without notice"





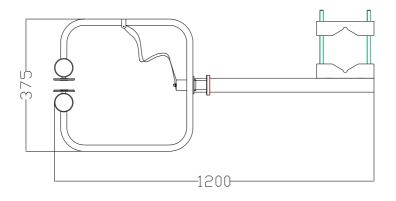
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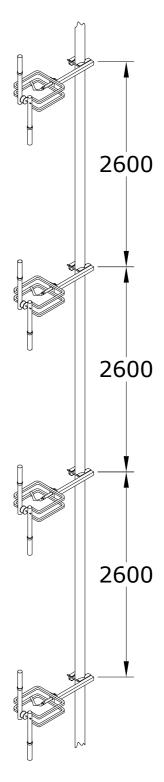
#### **TECHNICAL DATA (FULL-WAVE-SPACED)**

Number of bays	Dipoles per bay	Gain¹		Weight² Kg	Antenna height L m	Wind load (v=160 km/h) kg
Days	Day	dB	times	Ng		ky
1	1	-3.4	0.5	6		11.5
2	1	0.0	1.0	12	3.6	23
4	1	3.2	2.1	24	8.8	46
6	1	5.2	3.3	36	14.0	69
8	1	6.5	4.5	48	21.8	92
12	1	8.4	6.9	72	29.6	138

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

### **DIMENSIONS**





- Gain is provided for Horizontal 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.





<sup>&</sup>lt;sup>2</sup> without mounting hardware

<sup>&</sup>lt;sup>3</sup> without radome