



ANTENNA EXPERTS

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Model # AC5-127 118 – 137 MHz. 5 dBi Gain

VHF High Gain Aviation Band Omni-Directional Antenna

DESIGN FEATURES: AC5-127 Omni-directional VHF aviation band antenna is rugged all weather model, radiator enclosed in a fiberglass radome, uses high class brass and 6063T6 ultra corrosion resistant architectural aluminum alloy and does not require any field tuning or adjustments. The compact size of omni-directional high gain VHF aviation band antenna allows easy handling, shipping and highly suitable for ATC sites for ground-to-ground and ground-to-air communication without having the requirement of multiple antennas. Antenna termination and feed cable lie enclosed inside the mounting pipe for complete weather protection. Cylindrical enclosure is used for low wind loading and for minimal effect of ice formation on the VHF aviation antenna operation as well as providing an aesthetically pleasing appearance.

CONSTRUCTIONS: The VHF high gain aviation band antenna is consisting of large diameter radiating elements stacked vertically and enclosed in fiber glass tube. The ATC antenna uses 8 numbers of small ground plane elements which are removable for ease of shipping and transportation. These ground plane elements can be assembled in the field with simple hand tools. The ground elements of ATC base station antenna are attached via stainless steel stud systems at points along the antenna skirt hub. The special “Choke and Spark Gap” technique is used for smooth VSWR and constant 5+dBi. gain over the entire 117.975-137 MHz. frequency band. The fiberglass enclosure has excellent transparency for RF signals and enough strength to withstand specified wind loads. The marine grade stainless steel mounting brackets are supplied with the high gain aviation antenna.



ELECTRICAL SPECIFICATIONS:

Frequency Range	117.975 - 137 MHz.
Gain	5.15 dBi. (3 dBd)
Bandwidth	Entire Band
Polarization	Vertical
Input Impedance	50 Ohms
Radiation Pattern	Omni-directional
Vertical Beam-width –Half Power Points.	40 Degrees
VSWR – Better than	2:1
RF Power Handling Capacity	500 Watts.
Input Termination	N-Female

MECHANICAL SPECIFICATIONS:

Materials	Brass & 6063T6 Aluminum
Mounting Hardware -Materials	Marine Grade Stainless Steel
Wind Rating	180 Km/Hr.
Overall Length	3.10 Meters
Shipping Length	3.15 Meters
Maximum Mount Pipe Diameter	52 mm (2 Inches)
Enclosure Materials	Fiberglass Tube
Gross Weight	14 Kgs.

ENVIRONMENTAL SPECIFICATIONS:

Operating Temperature	(-)30 to +70 Degrees Celsius
Storage Temperature	(-)40 to +80 Degrees Celsius
Humidity	0 to 100% RH

Please contact us for further information like Azimuth & Elevation radiation patterns, Image and frequency Vs VSWR graph.

Note: All information contained in the datasheet is subject to change without any prior notice.