



VHF High Gain ATC Omnidirectional Antenna

AC3-127

118-137 MHz

3 dBi Gain

Heavy-Duty Engineering: The **AC3-127 Omni-directional VHF Aviation Antenna** is a ruggedized, all-weather solution optimized for high-reliability air traffic control (ATC) ground-to-air and ground-to-ground communications. Built from ultra-corrosion-resistant **6063T6 architectural aluminum alloy** and protected by a durable **ABS radome**, this compact antenna minimizes logistics footprints while completely eliminating the need for complex multi-antenna arrays or field tuning. For enhanced environmental protection, the antenna termination and coaxial feed cable are entirely concealed within the heavy-duty mounting pipe, while all exposed metallic components feature a premium **powder-coated finish**. The system is engineered for rapid deployment, allowing full assembly of the dismantled components via a robust stainless steel stud system in less than two minutes.

Optimized Radiation: Operating across the unified **117–137 MHz frequency spectrum**, this aviation base station antenna features large-diameter vertically stacked radiating elements housed within a high-strength, RF-transparent fiberglass enclosure. Leveraging advanced "**Impedance Matching**" engineering, the design maintains a highly stable **VSWR** and a consistent **3 dBi gain** across the entire band. This optimized architecture ensures a uniform **76-degree vertical beamwidth**, providing predictable, wide-area signal propagation over rugged terrain and coastal zones. The system comes complete with **marine-grade stainless steel** mounting hardware to withstand extreme wind loading and severe environmental degradation.



Electrical Specifications:

Frequency Range	117.975 - 137 MHz.
Gain - Typical	3 dBi.
Bandwidth	Entire Band
Polarization	Vertical
Input Impedance	50 Ohms
Radiation Pattern	Omni-directional
Vertical Beam-width –Half Power Points.	76 Degrees
VSWR – Better Than	1.5:1
RF Power Handling Capacity	500 Watts.
Input Termination	N-Female

Mechanical Specifications:

Materials	Brass & Aluminum
Mounting Hardware -Materials	Stainless Steel
Wind Rating	220 Km/Hr.
Overall Length	1.3 Meters (51 Inches)
Shipping Length	0.9 Meter (36 Inches)
Maximum Mount Pipe Diameter	52 mm (2 Inches)
Maximum Width at Radial Bottom	0.46 Meter (18 Inches)
Enclosure Materials	Fiberglass Tube
Gross Weight	4.5 Kgs.

Environmental Specifications:

Operating Temperature	(-)30 to +70 Degrees Celsius
Storage Temperature	(-)40 to +80 Degrees Celsius
Humidity	0 to 95% 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.