



UHF High Gain Military ATC Omni Antenna

AC3-312

225-400 MHz

3 dBi Gain

Advanced UHF Aviation Antenna: The **AC3-312** is a rugged, high-performance **omni-directional UHF aviation band antenna** engineered for seamless ground-to-ground and ground-to-air military and ATC communication. Operating across the entire **225–400 MHz frequency band**, this broadband antenna utilizes stacked, large-diameter radiating elements paired with a specialized **"Impedance Matching" technique**. This advanced engineering ensures high suppression of skin current, delivering an ultra-smooth **VSWR** and a constant **3 dBi gain** without requiring any field tuning. Constructed from premium **6063T6 architectural aluminum alloy** and supplied with marine-grade **type 316 stainless steel mounting brackets**, its ultra-corrosion-resistant build guarantees maximum structural integrity for fixed-station, shipboard, and mobile deployments.

Ruggedized RF Protection: For ultimate survivability in extreme environments, the antenna is fully enclosed in a high-tech, **UV-resistant ABS radome**. This heavy-duty, cylindrical enclosure features exceptional **RF transparency**, low wind loading, and minimized ice-formation vulnerability, ensuring uninterrupted broadband performance under severe weather conditions. Designed with an integrated **N-Female termination** sealed at the bottom of the mounting pipe for absolute weatherproofing, the compact and aesthetically streamlined housing eliminates the need for multiple antennas. The AC3-312 comes standard in a military-spec olive green finish, with customizable housing colors available to meet specific tactical or aesthetic deployment requirements.

UHF MIL-STD
Aviation Band
Omni Antenna
Model #
AC3-312
Mfd. By:
ANTENNA
EXPERTS



Electrical Specifications

Frequency Range	225 - 400 MHz.
Gain - Typical	3 dBi.
Bandwidth	Entire Band
Polarization	Vertical
Input Impedance	50 Ohms
Radiation Pattern	Omni-directional
Vertical Beam-width –Half Power Points.	78 Degrees
VSWR – Better Than	2:1
RF Power Handling Capacity	500 Watts.
Input Termination	N-Female

Mechanical Specifications

Materials	6063T6 Aluminum Alloy
Mounting Hardware -Materials	Stainless Steel
Wind Rating	200 Km/Hr.
Overall Length	850 mm
Shipping Length	900 mm
Maximum Mount Pipe Diameter	51 mm (2 Inches)
Enclosure Materials	High Strength ABS Tube
Gross Weight with Brackets	5.0 Kgs.
Corrosive Treatment	Epoxy Based Powder Coated
Finishing	PU Based Olive Green

Environmental Specifications

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

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