



# ANTENNA EXPERTS

E-mail: [info@antennaexperts.in](mailto:info@antennaexperts.in) Website: [www.antennaexperts.in](http://www.antennaexperts.in)

Model # AC3-312

225 – 400 MHz.

3 dBi Gain

## UHF Aviation Band Omni-Directional Antenna

**DESIGN FEATURES:** AC3-312 Omni-directional UHF aviation band antenna is rugged all weather model, enclosed in a ABS radome, uses high class brass and aluminum alloy and does not require any field tuning or adjustments. The compact size (0.9Meter shipping length) of omni-directional UHF aviation band antenna allows easy handling, shipping and highly suitable for ATC sites without having the requirement of multiple antennas. The N-Female termination of antenna is fixed at the bottom of the mounting pipe for complete weather protection. Cylindrical enclosure is used for low wind loading and for minimal effect of ice formation on the antenna operation as well as providing an aesthetically pleasing appearance.

**CONSTRUCTIONS:** The UHF aviation band antenna is consisting of large diameter radiating elements stacked vertically and enclosed in ABS radome. The special “Choke and Spark Gap” technique is used for smooth VSWR and constant 3dBi. gain over the entire 225-400 MHz. frequency band. The UV resistant ABS enclosure has excellent transparency for RF signals and enough strength to withstand specified wind loads. The stainless steel mounting brackets and bird resistant cap is supplied with the antenna.



### **ELECTRICAL SPECIFICATIONS:**

Frequency Range	225 - 400 MHz.
Gain	3 dBi.
Bandwidth	Entire Band
Polarization	Vertical
Input Impedance	50 Ohms
Radiation Pattern	Omni-directional
Vertical Beam-width –Half Power Points.	76 Degrees
VSWR	2:1
RF Power Handling Capacity	500 Watts.
Input Termination	N-Female

### **MECHANICAL SPECIFICATIONS:**

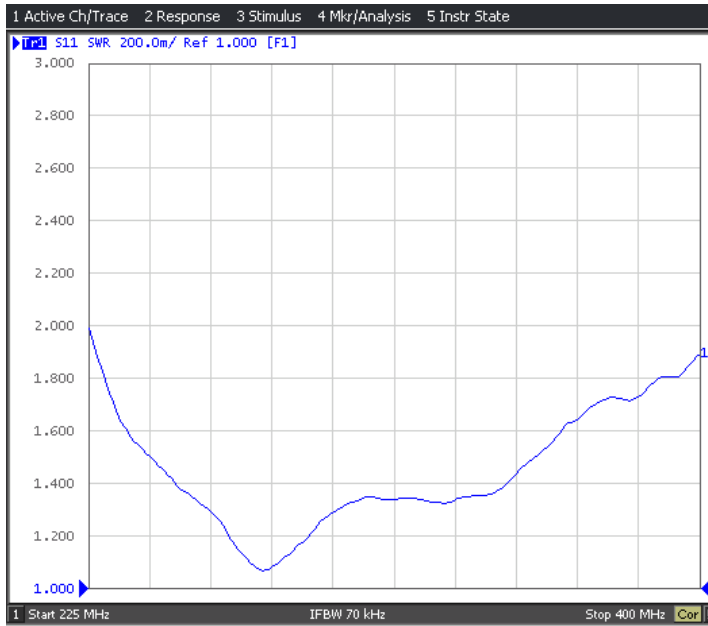
Materials	Brass & Aluminum
Mounting Hardware -Materials	Stainless Steel
Wind Rating	200 Km/Hr.
Overall Length	0.85 Meter
Shipping Length	0.90 Meter
Maximum Mount Pipe Diameter	52 mm (2 Inches)
Enclosure Materials	UV Resistant ABS
Enclosure Length	530 mm
Net Weight	5 Kgs.
Gross Weight	6 Kgs.

### **ENVIRONMENTAL SPECIFICATIONS:**

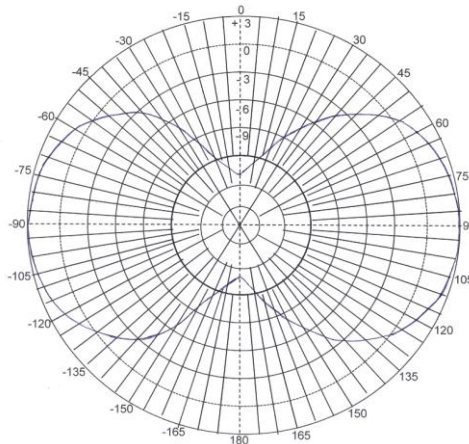
Operating Temperature	(-)40 to +85 Degrees Celsius
Storage Temperature	(-)45 to +85 Degrees Celsius
Humidity	0 to 95% RH

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

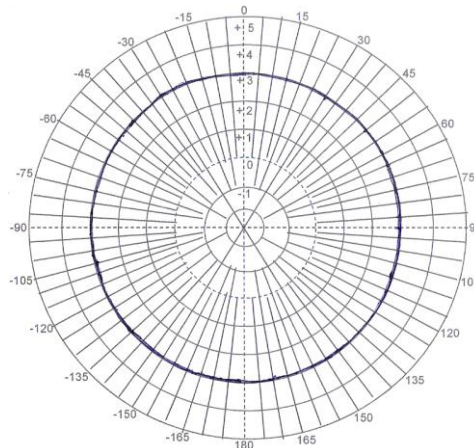
UHF AVIATION BAND OMNI-DIRECTIONAL ANTENNA  
225 – 400 MHz. BAND MODEL # AC3-312



Frequency Vs VSWR Curve



ELEVATION RADIATION PATTERN



AZIMUTH RADIATION PATTERN

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