



ANTENNA EXPERTS

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Model # AC-108-512 108 – 512 MHz. 2 dBi Gain

VHF/UHF Aviation Band Omni-Directional Antenna

DESIGN FEATURES: AC-108-512 Omni-directional VHF/UHF band antenna is rugged all weather model, uses high class ultra corrosion resistant architectural aluminum alloy and does not require any field tuning or adjustments. The compact size of omni-directional VHF/UHF band antenna allows easy handling, shipping. The antenna is highly suitable as Tx and Rx antenna with high efficiency, to meet the broadband requirement of a base station antenna such as spectrum monitoring or jamming and ATC sites for ground-to-ground and ground-to-air application without having the requirement of multiple antennas. The antenna features high suppression of skin current which provides the smooth VSWR and constant gain over the entire 108-512MHz frequency band. The antenna when packed comes with ground radials removed from the antenna body for ease of packing and transportation. AC-108-512 covers the VHF/UHF civilian band, UHF/UHF aeronautical band and military aviation band.



CONSTRUCTIONS: The VHF/UHF aviation antenna is consisting of large diameter radiating elements, enclosed in ABS tube. The ABS enclosure has excellent transparency for RF signals and enough strength to withstand specified wind loads. The mounting hardware and all fasteners are made of marine grade stainless steel. Large diameter vertical radiating element ensures the constant vertical beam-width of 78 degrees and 2dBi gain over the entire band. 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 aviation antenna operation as well as providing an aesthetically pleasing appearance.

ELECTRICAL SPECIFICATIONS:

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| Frequency Range | 108 - 512 MHz. |
| Gain | 2.14 dBi. |
| Bandwidth | Entire Band |
| Polarization | Vertical |
| Input Impedance | 50 Ohms |
| Radiation Pattern | Omni-directional |
| Vertical Beam-width –Half Power Points. | 78 Degrees |
| VSWR | 2.5:1 |
| RF Power Handling Capacity | 500 Watts. |
| Input Termination | N-Female |

MECHANICAL SPECIFICATIONS:

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|------------------------------|------------------------------|
| Antenna Base Hub Materials | 6063T6 Aluminum Alloy |
| Mounting Hardware -Materials | Marine Grade Stainless Steel |
| Wind Rating | 180 Km/Hr. |
| Overall Length | 1.2 Meters |
| Shipping Length | 1.3 Meters |
| Maximum Mount Pipe Diameter | 52 mm (2 Inches) |
| Enclosure Materials | ABS Tube |
| Gross Weight | 6 Kgs. |

ENVIRONMENTAL SPECIFICATIONS:

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|-----------------------|------------------------------|
| 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 and frequency Vs VSWR graph and Image of the antenna.

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