

ANTENNA EXPERTS

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3 dBi Gain

Model # CD-118-400 118 – 400 MHz

Omni-Directional Coaxial Dipole Antenna

DESIGN FEATURES: CD-118-400 VHF/UHF aviation band coaxial dipole antenna is an omni-directional antenna for vertically polarized waves. CD-118-400 Omni-directional VHF/UHF aviation coaxial dipole antenna is rugged all weather model, enclosed in a ABS radome, uses ultra corrosion resistant aluminum alloy and does not require any field tuning or adjustments. The compact size of omni-directional coaxial dipole antenna allows easy handling, shipping and highly suitable for VHF/UHF ATC sites without having the requirement of multiple antennas. The coaxial dipole antenna features high suppression of skin current which provides the smooth VSWR over the 118-400MHz frequency band. 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. Due to sturdy design the coaxial dipole antenna is highly suitable for fixed station application, shipboard mounting and mobile application.

CONSTRUCTIONS: The coaxial dipole antenna is consisting of round diameter radiating elements stacked vertically and enclosed in ABS radome. The special "Choke and Spark Gap" technique is used for constant superior performance over the entire 118-400 MHz. frequency band. The UV resistant ABS enclosure has excellent transparency for RF signals and enough strength to withstand specified wind loads. The N-Female termination of antenna is fixed at the bottom of the mounting pipe for complete weather protection. The marine grade type 316 stainless steel mounting brackets are supplied with the coaxial dipole antenna. The antenna is supplied with olive green color.

ELECTRICAL SPECIFICATIONS:

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|-------------------------------|-------------------|------------------------------|
| Frequency Range | Coaxial | 118 - 400 MHz. |
| Gain - Typical | | 3 dBi. |
| Bandwidth | | Entire Band |
| Polarization | | Vertical |
| Input Impedance | | 50 Ohms |
| Radiation Pattern | | Omni-directional |
| -3 dB. Vertical Beam-width. | Dipole | 76 Degrees |
| VSWR | Antenna | 2.5:1 |
| RF Power Handling Capacity | Military | 500 Watts. |
| Input Termination | Grade Mfd. By: | N-Female |
| MECHANICAL SPECIFICATIONS: | ANTENNA | |
| Materials | EXPERTS | 6063T6 Aluminum Alloy |
| Mounting Hardware -Materials | | Marine Grade Stainless Steel |
| Wind Rating | | 200 Km/Hr. |
| Overall Length | | 1.4 Meters |
| Shipping Length | | 1.5 Meters |
| Maximum Mount Pipe Diameter | | 52 mm (2 Inches) |
| Enclosure Materials | | ABS |
| Net Weight | | 6 Kgs. |
| Gross Weight | | 7 Kgs. |
| ENVIRONMENTAL SPECIFICATIONS: | | |
| Operating Temperature | | (-)30 to +70 Degrees Celsius |
| Storage Temperature | | (-)40 to +80 Degrees Celsius |
| Humidity | | 0 to 95% RH |