

## UHF Fiber Glass Omnidirectional High Gain Collinear Antenna

AC9-450

406-512 MHz.

9 dBi. Gain

**DESIGN FEATURES:** AC9-450 Omni-directional Collinear Antenna is rugged all weather model uses high class brass and 6063T6 ultra corrosion resistant aluminum alloy and does not require any field tuning or adjustments. All junctions are fully welded to prevent RF inter-modulation and antenna is completely protected within a high-tech ruggedized fiber glass radome to ensure survivability in the worst environments. The fiber glass enclosure has excellent transparency for RF signals and enough strength to withstand specified wind loads. The antenna is supplied with olive green military colour. Other customized color can also be supplied on request. The compact size of collinear antenna allows easy handling and shipping.

**CONSTRUCTIONS:** The AC9-450 is a center fed design which eliminates the distortion of the radiation pattern and ensures a true omni-directional horizontal pattern. The special stub matching is used for smooth VSWR and constant gain over the specified frequency band. The collinear antenna consists of large diameter brass radiating elements stacked vertically, fed in phase and enclosed in fiberglass tube. The antenna termination is enclosed at bottom of the antenna for complete weather protection. The stainless steel mounting hardware is supplied with the antenna.



### ELECTRICAL SPECIFICATIONS:

|  |                  |
|--|------------------|
| Frequency Range                        | 406 -512 MHz.    |
| Gain                                   | 9 dBi.           |
| Bandwidth                              | 25 MHz.          |
| Polarization                           | Vertical         |
| Input Impedance                        | 50 Ohms.         |
| Radiation Pattern                      | Omni Directional |
| Vertical Beam-width –Half Power Points | 18 Degrees       |
| VSWR – Better Than                     | 1:1.5            |
| RF Power Handling Capacity             | 250 Watts.       |
| Input Termination                      | N-Female         |

### MECHANICAL SPECIFICATIONS:

|                             |                  |
|-----------------------------|------------------|
| Mounting Hardware           | Stainless Steel  |
| Gross Weight                | 5 Kgs.           |
| Wind Rating                 | 200 Km/Hr.       |
| Overall Length              | 2.70 Meters      |
| Shipping Length             | 2.75 Meters      |
| Support Pipe Outer Diameter | 51 mm            |
| Support Pipe Materials      | Aluminum         |
| Maximum Mount Pipe Diameter | 51 mm (2 Inches) |
| Enclosure Materials         | Fiberglass       |
| Enclosure Outer Diameter    | 45 mm            |
| Enclosure Length            | 2400 mm          |

### 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 & frequency Vs VSWR graph of antenna.

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