

## Fiber Glass Omnidirectional High Gain Collinear Antenna

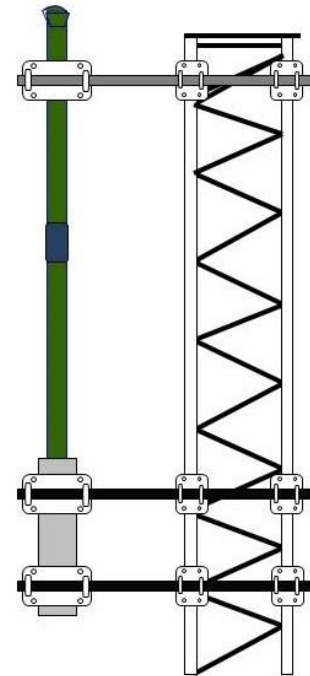
AC12-250

220-290 MHz.

12 dBi.(10dBd) Gain

**DESIGN FEATURES:** AC12-250 Fiberglass Omni-directional Collinear Antenna is rugged all weather model uses high class brass and aluminum alloy and does not require any field tuning or adjustments. The antenna is supplied in two segments for easy of handling and shipping. The upper and lower portion of antenna is threaded together to prevent RF inter-modulation and antenna is completely protected within a high-tech ruggedized radome to ensure survivability in the worst environments. The antenna termination is enclosed at bottom of the antenna for complete weather protection.

**CONSTRUCTIONS:** The AC12-250 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 consist of large diameter brass radiating elements stacked vertically, fed in phase and enclosed in fiber glass tube. AC12-250 fiber glass collinear antenna is suitable for side mounting on the tower and is supplied with mounting hardware, including a non metallic 1.2 Meters (4 feet) long horizontal arm to hold the fiberglass omni-directional antenna at the top, on the side of antenna tower.



### ELECTRICAL SPECIFICATIONS:

|  |                  |
|--|------------------|
| Frequency Range                        | 220 -290 MHz.    |
| Gain                                   | 12 dBi. (10dBd)  |
| Bandwidth                              | 12 MHz.          |
| Polarization                           | Vertical         |
| Input Impedance                        | 50 Ohms.         |
| Radiation Pattern                      | Omni Directional |
| Vertical Beam-width –Half Power Points | 9 Degrees        |
| VSWR – Better Than                     | 1.5:1            |
| RF Power Handling Capacity             | 150 Watts.       |
| Input Termination                      | N-Female         |

### MECHANICAL SPECIFICATIONS:

|                                     |                              |
|-------------------------------------|------------------------------|
| Mounting Hardware                   | Marine Grade Stainless Steel |
| Net Weight                          | 8 Kgs.                       |
| Gross Weight with Mounting Hardware | 18 Kgs                       |
| Wind Rating                         | 200 Km/Hr.                   |
| Overall Length                      | 5.6 Meters                   |
| Shipping Length                     | 3.0 Meters                   |
| Support Pipe Materials              | 6063T6 Aluminum Alloy        |
| Maximum Mount Pipe Diameter         | 51 mm (2 Inches)             |
| Enclosure Materials                 | High Strength Fiberglass     |
| Enclosure Outer Diameter            | 45 mm                        |
| Enclosure Length                    | 5300 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 of the antenna.

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