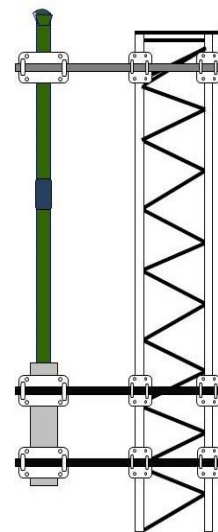


## Omni-directional TETRA Band High Gain Fiberglass Collinear Antenna

|          |              |              |
|----------|--------------|--------------|
| AC12-420 | 410-430 MHz. | 12 dBi. Gain |
|----------|--------------|--------------|

**DESIGN FEATURES:** AC12-420 Fiberglass Omni-directional TETRA Band Collinear Antenna is rugged all weather model 6063T6 ultra corrosion resistant architectural aluminum, high class brass 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 AC12-420 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 12dBi gain over the entire 410-430 MHz TETRA band. The collinear antenna consists of large diameter brass radiating elements stacked vertically, fed in phase and enclosed in fiber glass tube. The mounting hardware is made of type 316 marine grade stainless steel and supplied with the antenna. AC12-420 TETRA band 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.



### ELECTRICAL SPECIFICATIONS:

|  |                  |
|--|------------------|
| Frequency Range                        | 410 - 430 MHz.   |
| Gain                                   | 10dBd. (12 dBi.) |
| Bandwidth                              | 20 MHz.          |
| Polarization                           | Vertical         |
| Input Impedance                        | 50 Ohms.         |
| Radiation Pattern                      | Omni Directional |
| Vertical Beam-width –Half Power Points | 7 Degrees        |
| VSWR – Better Than                     | 1:1.5            |
| RF Power Handling Capacity             | 250 Watts.       |
| Input Termination                      | N-Female         |

### MECHANICAL SPECIFICATIONS:

|                                     |                              |
|-------------------------------------|------------------------------|
| Mounting Hardware                   | Marine Grade Stainless Steel |
| Net Weight                          | 8 Kgs.                       |
| Gross Weight with Mounting Hardware | 20 Kgs                       |
| Wind Rating                         | 200 Km/Hr.                   |
| Overall Length                      | 5.9 Meters                   |
| Shipping Length                     | 3.0 Meters                   |
| Support Pipe Materials              | 6063T6 Aluminum              |
| Maximum Mount Pipe Diameter         | 51 mm (2 Inches)             |
| Enclosure Materials                 | Fiberglass                   |
| Enclosure Outer Diameter            | 45 mm                        |
| Enclosure Length                    | 5100 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 antenna.

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