



ANTENNA EXPERTS

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Model # AC3-420

Frequency 410 – 430 MHz.

3 dBd Gain

Omni-directional TETRA Band Collinear Antenna

DESIGN FEATURES: AC3-420 Omni-directional TETRA Band Collinear Antenna is rugged all weather model uses 6063T6 ultra corrosion resistant architectural aluminum, high class brass 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 ABS radome to ensure survivability in the worst environments. The UV resistant ABS enclosure has excellent transparency for RF signals and enough strength to withstand specified wind loads. The compact size of collinear antenna allows easy handling and shipping. The antenna is supplied with olive green military colour. Other customized color can also be supplied on request.



CONSTRUCTIONS: The AC3-420 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 3dBd gain over the entire 410-430MHz TETRA frequency band. The collinear antenna consist of large diameter brass radiating elements stacked vertically, fed in phase and enclosed in ABS tube. The antenna termination is enclosed at bottom of the antenna for complete weather protection. The mounting hardware is made of type 316 marine grade stainless steel and supplied with the antenna.

ELECTRICAL SPECIFICATIONS:

Frequency Range	410 -430 MHz.
Gain	3dBd. (5.15 dBi.)
Bandwidth	20 MHz.
Polarization	Vertical
Input Impedance	50 Ohms.
Radiation Pattern	Omni Directional
Vertical Beam-width –Half Power Points	36 Degrees
VSWR – Less Than	1:1.5
RF Power Handling Capacity	250 Watts.
Input Termination	N-Female

MECHANICAL SPECIFICATIONS:

Mounting Hardware	Marine Grade Stainless Steel
Gross Weight	2 Kgs.
Wind Rating	200 Km/Hr.
Overall Length	1.1 Meters
Shipping Length	1.2 Meters
Support Pipe O.D.	40 mm
Support Pipe Materials	6063T6 Aluminum
Maximum Mount Pipe Diameter	51 mm (2 Inches)
Enclosure Materials	UV Resistant ABS
Enclosure Outer Diameter	33 mm
Enclosure Length	940 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.