

UHF High Gain TETRA Yagi Antenna

AY-420

410-430 MHz.

13 dBi. (11dBd) Gain

DESIGN FEATURES: Antenna Experts Yagi antenna design reflects innovative modern antenna construction. The unique design of the TETRA yagi antenna feed which works as matching device to keep the VSWR low resulting in increased efficiency of the yagi antenna. The mounting hardware supplied facilitates mounting on either vertical or horizontal members. The yagi antenna comes in pre-assembled condition with permanently fixed elements in the support boom. The small surface area on the tetra yagi antenna minimizes wind resistance and conserves tower loading capacity.

CONSTRUCTIONS:

Radiating elements, supporting booms and adjoining metal castings of AY-420 tetra yagi antenna have been constructed in high quality 6063T6



ultra corrosion resistant architectural aluminum alloys to prevent corrosion. The yagi antenna uses special feed which eliminates the use of folded dipole. The Yagi antenna is supplied with N termination fixed on the driven element. The feed point radiator is enclosed in a Nylon housing designed to protect against severe environmental conditions and minimize pattern distortion. This directional yagi antenna comes factory tuned and does not require any field adjustment.

ELECTRICAL SPECIFICATIONS:

Frequency Range	410 - 430 MHz.
Gain	13 dBi. (11 dBd.)
Bandwidth	Entire Band
Polarization	Vertical or Horizontal
Input Impedance	50 Ohms.
Radiation Pattern	Directional
Horizontal Beam-width –Half Power Points.	50 Degrees
Vertical Beam-width –Half Power Points.	40 Degrees
Front to Back Ratio	16 dB.
VSWR – Better Than	1:1.5
RF Power Handling Capacity	250 Watts.
Input Termination	N-Female

MECHANICAL SPECIFICATIONS:

Materials	6063T6 Aluminum Alloy
Mounting Hardware -Materials	Marine Grade Stainless Steel
Weight	3.0 Kgs.
Wind Rating	200 Km/Hr.
Overall Length	1.6 Meters.
Shipping Length	1.7 Meters.
Support Boom-Materials -Cross Section-Outer Diameter.	Aluminum-Square Tube -25 mm
Elements-Materials-Cross Section-Outer Diameter.	Aluminum-Round Tube-12.7mm
Maximum Mount Pipe Diameter	52mm (2 Inches)

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.