

DIRECTIONAL YAGI ANTENNA

AY-450

400-512 MHz.

13 dBi. (11dBd) Gain

DESIGN FEATURES: Antenna Experts Yagi antenna design reflects innovative modern antenna construction. The unique design of the 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 yagi antenna minimizes wind resistance and conserves tower loading capacity.

CONSTRUCTIONS: Radiating elements, supporting booms and adjoining metal castings of AY-450 yagi antenna have been constructed in high quality 6063T6 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	400 - 512 MHz.
Gain	13 dBi. (11 dBd.)
Bandwidth	25 MHz.
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	1:1.5
RF Power Handling Capacity	250 Watts.
Input Termination	N-Female

MECHANICAL SPECIFICATIONS:

Materials	6063T6 Aluminum
Mounting Hardware -Materials	Stainless Steel
Weight	3.0 Kgs.
Wind Rating	200 Km/Hr.
Overall Length	1.65 Meters.
Shipping Length	1.75 Meters.
Support Boom-Materials -Cross Section-Outer Diameter.	Aluminum-Round Tube -25.4mm
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