



ANTENNA EXPERTS

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Model CY-225-406D 225 – 406 MHz. 13 dBic. Gain

UHF GROUND-TO-AIR CIRCULAR POLARIZED DUAL STACKED YAGI ARRAY

DESIGN FEATURES: CY-225-406D rugged, high gain, all weather crossed elements dual stacked yagi antenna is designed for satellite communication (SATCOM) application with right hand circular polarization. When the array is mounted on the rotator (not supplied), the crossed elements array makes an angle of 45 degrees with respect to horizontal plane. A crossed member is supplied with the array for necessary mounting arrangement on a Rotator. Dual stacked circular polarized yagi array can be used with most tactical Multi-Band, Multi-Mode Receivers (MBMMR) and ground transceivers that accept 50 ohms antenna impedance.

CONSTRUCTIONS: The dual stacked yagi antenna uses a 6063T6 ultra corrosion resistant architectural aluminum alloy and supplied with powder coating to protect it further from severe environment conditions. The antenna termination uses N-Female connector fixed on the antenna dipole. The dual yagi array is supplied with complete mounting hardware balanced at its center of gravity for mounting on a rotator for azimuth and elevation plane scanning. The mounting hardware supplied is of marine grade stainless steel fasteners with an aluminum cross member for stacking. If user does not have rotator, a crossover mounting plate to mount the antenna on top of the mast can be supplied.

ELECTRICAL SPECIFICATIONS:

Frequency Range	225 - 406 MHz.
Gain	13 dBic.
Bandwidth	Entire Band.
Polarization	RHCP
Input Impedance	50 Ohms.
Horizontal Beam-width –Half Power Points	28 Degrees (if stacked horizontally)
Vertical Beam-width –Half Power Points	50 Degrees (if stacked horizontally)
Axial Ratio	3 dB.
Cross Polarization Discrimination	15 dB.
Front to Back Ratio	20 dB.
VSWR – Equal to or better than	2.5 : 1
RF Power Handling Capacity	250 Watts.
Input Termination	N-Female

MECHANICAL SPECIFICATIONS:

Mounting Hardware	Stainless Steel
Gross Weight	15 Kgs.
Wind Rating	170 Km/Hr.
Overall Length	1.7 Meters
Shipping Length	1.8 Meters
Number of Yagi Booms	2 Nos.
Support Boom-Materials-Cross Section- Outer Diameter	Aluminum -Round Tube-25 mm
Elements - Materials - Cross Section- Outer Diameter	Aluminum -Round Tube-12.7 mm
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

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