



ANTENNA EXPERTS

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Model CY-450D 330 – 512 MHz. 13 dBic. Gain

CIRCULAR POLARIZED DUAL STACKED YAGI ARRAY

DESIGN FEATURES: CY-450D rugged, all weather crossed elements dual stacked yagi antenna is designed for circular polarization. The phase shifter cable and harness cable comes with impedance matched molded joints for low VSWR and protection against weather. When the array is mounted on the rotator, the crossed elements array makes an angle of 45 degrees with respect to horizontal plane. A crossed member will be supplied with the array for necessary mounting arrangement on a Rotator. Dual Stacked Yagi antenna can be configured to work as RHCP or LHCP selectable by inter-changing the delay harness cable.

CONSTRUCTIONS: The Dual Stacked Yagi Antenna uses a gamma matching feed, eliminating the use of folded dipole. 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 stainless steel fasteners with an aluminum cross member for stacking.

ELECTRICAL SPECIFICATIONS:

Frequency Range	330 - 512 MHz.
Gain	13 dBic.
Bandwidth	10 MHz.
Polarization	LHCP or RHCP (Field Selectable)
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	2 dB.
Cross Polarization Discrimination	15 dB.
Front to Back Ratio	20 dB.
VSWR – Equal to or better than	1.5 : 1
RF Power Handling Capacity	250 Watts.
Input Termination	N-Female

MECHANICAL SPECIFICATIONS:

Mounting Hardware	Stainless Steel
Gross Weight	13 Kgs.
Wind Rating	170 Km/Hr.
Overall Length	1.8 Meters
Shipping Length	1.9 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.