



# ANTENNA EXPERTS

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Model CY-150Q 134 – 174 MHz. 16 dBic. Gain

## CIRCULAR POLARIZED QUAD STACKED YAGI ARRAY

**DESIGN FEATURES:** CY-150Q rugged, all weather crossed elements, VHF quad 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. Quad Stacked Yagi antenna can be configured to work as RHCP or LHCP selectable by inter-changing the delay harness cable.

**CONSTRUCTIONS:** VHF Quad 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 Quad Stacked Yagi Antenna when packed comes with elements removed from the antenna boom for ease of packing and transportation. The Quad 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 and three aluminum cross members for stacking.



### ELECTRICAL SPECIFICATIONS:

Frequency Range	134 - 174 MHz.
Gain	16 dBic.
Bandwidth	5 MHz.
Polarization	LHCP or RHCP (Field Selectable)
Input Impedance	50 Ohms.
Horizontal Beam-width –Half Power Points	28 Degrees
Vertical Beam-width –Half Power Points	25 Degrees
Axial Ratio	2 dB.
Cross Polarization Discrimination	17 dB.
Front to Back Ratio	21 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	30 Kgs.
Wind Rating	170 Km/Hr.
Overall Length	2.1 Meters
Shipping Length	2.4 Meters
Number of Yagi Booms	4 Nos.
Support Boom-Materials-Cross Section- Outer Diameter	Aluminum -Round Tube-25.4 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.