



ANTENNA EXPERTS

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Model # SD-312

225 –400 MHz.

3dBd. Gain

UHF AVIATION BAND OMNI-DIRECTIONAL STACKED DIPOLE ARRAY

Design Features: The SD-312 Aviation Band Antenna is manufactured using high-grade anodized aluminum. Powder coating of the complete aviation band antenna provides extra protection against corrosion in saline weather present in coastal areas. The SD-312 is heavy duty stacked dipole array features, high gain, high power handling capacity, low VSWR, low noise performance and null filling coverage with omni directional characteristics.

Constructions: The SD-312 Stacked Dipole Array consists of TWO folded dipoles stacked vertically, fed in phase. Termination of phasing harness cable sealed by heat shrinking tube making stacked dipole antenna waterproofing. The stacked dipole antenna is suitable for mounting on the top of tower and is supplied with two mounting brackets.

Radiation Pattern: When the TWO dipoles are arranged 180 degrees apart around the central mast, 3dBd. (5.15dBi) omni directional radiation pattern results. Aligning the TWO dipoles collinearly (facing in one direction) a 6dBd. (8.15dBi) offset radiation pattern can be obtained. The radiation pattern can be changed in the field by use of common hand tools.



ELECTRICAL SPECIFICATIONS:

Frequency Range	225 - 400 MHz.
Gain	3dBd Omni / 6dBd Offset
Bandwidth	60 MHz.
Polarization	Vertical
Input Impedance	50 Ohms.
Radiation Pattern	Omni Directional
Vertical Beam-width –Half Power Points	40 Degrees
VSWR	2 : 1
RF Power Handling Capacity	500 watts.
Input Termination	N-Female

MECHANICAL SPECIFICATIONS:

Mounting Hardware	Stainless Steel
Wind Rating	220 Km/Hr.
Overall Length	1.8 Meters
Support Pipe Aluminum – Outer Diameter	51 mm
Dipoles Aluminum – Outer Diameter	12.7 mm
Shipping Length	1.9 Meters
4.5 Feet Long Horizontal Side Arms – 2 Nos.	Aluminum
Maximum Mount Pipe Diameter	52 mm (2 Inches)
Gross Weight	7 Kgs.

ENVIRONMENTAL SPECIFICATIONS:

Operating Temperature	(-)30 to +70 Degrees Celsius
Storage Temperature	(-)40 to +80 Degrees Celsius
Humidity	0 to 95% RH