



ANTENNA EXPERTS

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Model # SD6-250 220 – 290 MHz. 6dBd. Omni, 9dBd. Offset Gain

OMNI-DIRECTIONAL FOUR STACKED DIPOLE ARRAY

DESIGN FEATURES: The SD6-250 high performance VHF stacked dipole array is designed for use with highly populated radio sites requiring long haul omni-directional coverage. The SD6-250 is heavy duty stacked dipole array features, wide bandwidth, high gain, high power handling capacity, low VSWR, low noise performance and null filling coverage with omni directional characteristics. This stacked dipole array is highly suitable as base station antennas for Repeater and Paging sites.

CONSTRUCTIONS: The SD6-250 Stacked Dipole Array consists of four folded dipoles stacked vertically, fed in phase. This Stacked Dipole Antenna operates at D.C. ground for protection against lightning. Termination of phasing harness cable sealed by heat shrinking tube making stacked dipole antenna waterproofing. The 6 Meters long central mast for mounting the dipoles is shipped in two sections of 3.6 Meters each for easy of shipping. The stacked dipole antenna is supplied with top mounting hardware. Similarly the antenna can be supplied with side mounting hardware of 1.35 Meters (4.5 feet) long two horizontal arms to hold the antenna on the side of the antenna tower.

RADIATION PATTERN: When the FOUR dipoles are arranged 90 degrees apart around the central mast, 6dBd. omni directional radiation pattern results. Aligning the FOUR dipoles collinearly (facing in one direction) a 9dBd. offset radiation pattern is obtained. The radiation pattern can be changed in the field by use of common hand tools.



ELECTRICAL SPECIFICATIONS:

Frequency Range	220 - 290 MHz.
Gain	6 dBd. Omni or 9 dBd. Offset
Bandwidth	20 MHz.
Polarization	Vertical
Input Impedance	50 Ohms.
Radiation Pattern	Omni Directional
Vertical Beamwidth –Half Power Points	18 degrees (Vertical)
VSWR	1.5 : 1
RF Power Handling Capacity	500 watts.
Input Termination	N-Female or N-Male
Lightning Protection	Direct Ground

MECHANICAL SPECIFICATIONS:

Mounting Hardware	Stainless Steel
Wind Rating	200 Km/Hr.
Overall Length	3.6 Meters
Support Pipe Aluminum – Outer Diameter	51 mm
Dipoles Aluminum – Outer Diameter	12.7 mm
Shipping Length	1.8 Meters
4.5 Feet Long Horizontal Side Arms – 2 Nos.	Aluminum
Maximum Mount Pipe Diameter	52 mm (2 Inches)
Gross Weight	18 Kg

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.