



ANTENNA EXPERTS

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Model # SD9-250

Frequency 220 – 290 MHz.

9dBd. Omni, 12dBd. Offset Gain

OMNI-DIRECTIONAL HIGH GAIN EIGHT STACKED DIPOLE ARRAY

DESIGN FEATURES: The SD9-250 ultra high performance VHF band stacked dipole array is designed for use with highly populated radio sites requiring long haul omni-directional coverage. The SD9-250 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 maintains constant 9dBd. gain and low VSWR over its 20 MHz bandwidth, making it highly suitable as base station antennas for repeater, paging and any other multi-channel communication systems. The radiation pattern can be changed in the field by use of common hand tools. The Vertical stacking distance is factory adjusted for highest possible efficiency. Specially designed center fed phasing harness ensures equal and in phase signal distribution to all the eight dipoles. The SD9-250 high gain stacked dipole array operates at D.C. ground for protection against lightning.

CONSTRUCTIONS: The stacked dipole array uses 6063T6 ultra corrosion resistant architectural anodized aluminum, consists of Eight folded dipoles stacked vertically, fed in phase. The center fed dipole ends and cable connections to the dipoles are sealed in epoxy at the end of the boom for protection against weather and imparting rigidity and strength to the dipoles structure. All the fasteners are made of marine grade SS. The 8 Meters long central mast for mounting the dipoles is shipped in three sections of 2.8 Meters each for easy of shipping. The dipoles are mounted on a tubular boom made of high strength aluminum alloy, which offers a low resistance discharge path against any lightning strike during the stormy weather. The N-Female termination of antenna sealed in flame retardant heat shrinking tube ensures complete waterproofing. The antenna can be supplied with or without central mast.

ELECTRICAL SPECIFICATIONS:

Frequency Range	220-290 MHz.
Gain	9 dBd. Omni or 12 dBd. Offset
Bandwidth	20 MHz.
Polarization	Vertical
Input Impedance	50 Ohms.
Radiation Pattern (Horizontal Beam-width)	Omni Directional (360 Degrees)
Vertical Beam-width –Half Power Points	9 Degrees
VSWR	1.5 : 1
RF Power Handling Capacity	500 Watts
Input Termination	N-Female
Lightning Protection	Direct Ground

MECHANICAL SPECIFICATIONS:

Mounting Hardware	Stainless Steel
Wind Rating	180 Km/Hr.
Overall Length	8 Meters
Support Pipe Aluminum – Outer Diameter	51 mm
Dipoles Aluminum – Outer Diameter	12.7 mm
Shipping Length	2.8 Meters
Maximum Mount Pipe Diameter	52 mm (2 Inches)
Gross Weight – with central mast	30 Kgs.
Gross Weight – without central mast	16 Kgs.

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.