

Section 1

BASE STATION ANTENNAS

Updated 14 February 2011

UHF Stack Dipole Arrays

Frequency
400 – 520 MHz

Bandwidth
FULL BAND



Constructed from either aluminium or stainless steel, these 2 Stack and 4 Stack Dipole Arrays cover the full UHF frequency range 400 to 520 MHz at less than 1.5:1 VSWR.

Each dipole in the array is end fed in phase via a power divider neatly concealed inside the 50 mm diameter mount tube. Terminated with an N-Female connector, these stack arrays are rated for up to 250 watts input power.

The dipole spacing of both the 2 stack and 4 stack models is calculated to give maximum accumulated gain and minimum side lobes in an array form.

Clients are invited to consult ZCG Scalar for advice about the clamps available to best suit their mounting arrangement.

Coaxial feeder cable, connectors and other accessories are available to complete your base station antenna installation.

SPECIFICATIONS	S2B44/1C	S4B44/1C
Construction	Aluminium, or add the letters 'SS' for Stainless Steel	
Dipoles in Array	2	4
Frequency	UHF 400 to 520 MHz	UHF 400 to 520 MHz
Bandwidth	Full Band	Full Band
Return Loss, VSWR	Better than -15 dB, less than 1.5:1 across the full band	
Tuning	Factory	Factory
Gain	4.5 dBd	7.0 dBd
Maximum Power	250 Watts	250 Watts
Impedance (Nom.)	50 Ohms	50 Ohms
DC Grounding	Yes	Yes
Polarisation	Vertical	Vertical
E-Plane	33°	16°
H-Plane	240°	240°
Cable Tail	None	None
Connector	N-Female located at the base of the mount tube	
Mount Tube Dimensions	1.5 metres long x 50 mm diameter	2.5 metres long x 50 mm diameter
Weight	6 kg in Aluminium 9 kg in S/Steel	10 kg in Aluminium 15 kg in S/Steel
Projected Area	0.150 m ²	0.248 m ²
Wind Load at 160 kph	18.6 kg, 0.183 kN	30 kg, 0.294 kN
Mounting	2 Clamps recommended	2 Clamps recommended

