Australian manufactured in East Gippsland

B620 series

Broadband UHF sidemount dipole

UHF 540-700 MHz

Build To Order

The B620 sidemount dipole is designed for UHF communication systems working within the 540-700MHz range. The exceptionally broad bandwidth and reliable construction make sidemount dipoles perfect for use as a fixed position antenna.

Filters, mounting hardware, coaxial feeder cables, bird-proofing and other installation accessories are all available separately.

SKU	B620	B620-SS
Construction	Welded corrosion resistant aluminium body, external coaxial cable and connector	Welded 304 stainless steel frame, external coaxial cable and connector
Frequency range	540-700 MHz - UHF	
Bandwidth	Full frequency range stated - 160 MHz	
VSWR	<1.5:1 across bandwidth	
Tuning	Factory	
Gain	0 dBd for a single bay, stacking increases gain	
Maximum power	250 Watts	
Impedance - nominal	50 Ohms	
DC grounding	Yes	
Polarisation	Vertical	
Cable	500mm RG58 A/U - rear exit from antenna	
Connector	N-type female fitted as standard or specify requirements	
Dipole height	220mm	
Weight	2.0kg	3.0kg
Projected area	0.14m^2	
Wind load at 160kph	Front: 0.367kg, 0.004kn Side: 1.715kg, 0.017kn	Front: 0.366kg, 0.004kn Side: 1.713kg, 0.017kn
Mount section	260mm x 32mm	260mm x 31.8mm
Mounting hardware order separate	Parallel: 1 x EB1-SS or 1 x UB3-SS Right-angle 1 x RB8 or 1 x UB2-SS	
Mounting position recommended	Mount as high on your structure, mast or tower as possible using the appropriate mounting hardware.	
Installation tools required	Adjustable spanner for mounting hardware securing. Self-amalgamating butyl rubber tape and uPVC electrical tape for termination sealing.	

N-type female fitted as standard

+61 3 5157 1203
www.zcg.com.au

1 Year Manufacturers Warranty
Terms & Conditions apply.

Specifications are subject to change without prior notice

Updated 4th October 2023

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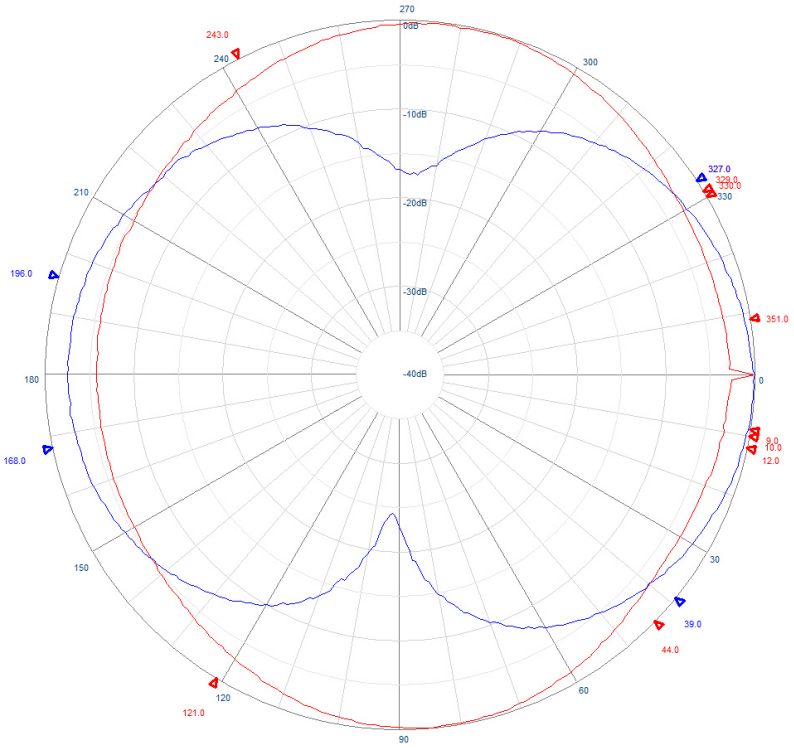
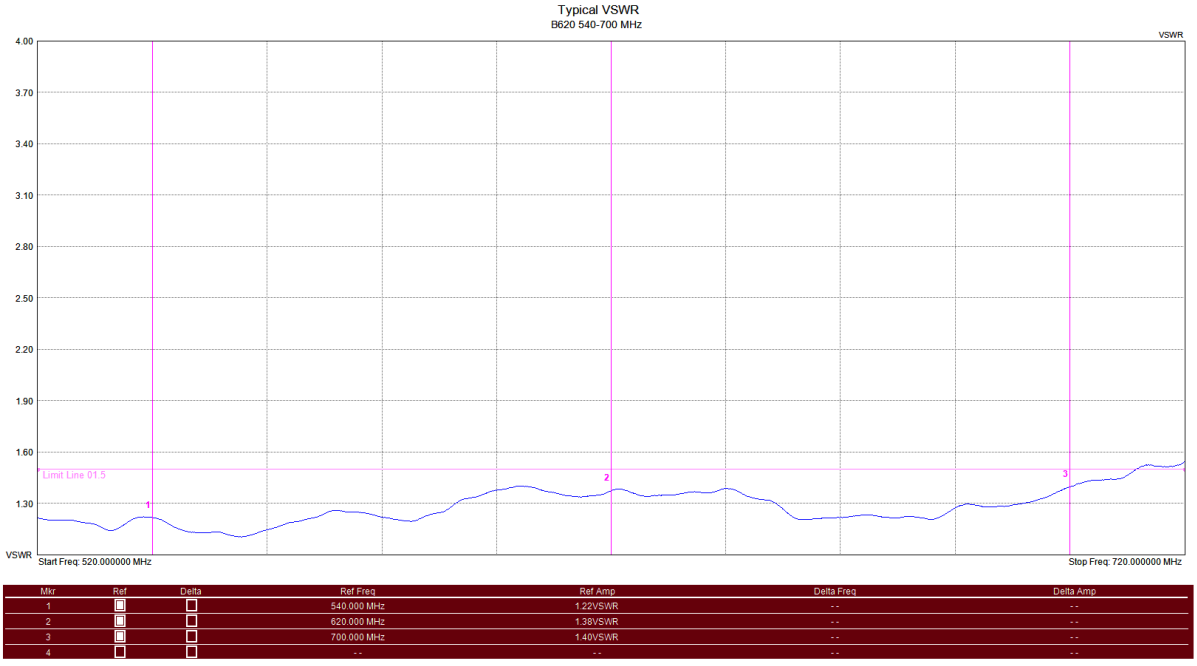


Example radiation pattern



Mkr	Ref	Delta	Ref Freq	Ref Amp	Delta Freq	Delta Amp
1			540.000 MHz	1.22VSWR	- -	- -
2			620.000 MHz	1.38VSWR	- -	- -
3			700.000 MHz	1.40VSWR	- -	- -
4			- -	- -	- -	- -

Typical VSWR

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Mechanical Data

Height of array	Subject to configuration
Total net weight	Refer to table
Wind Load	Refer to table
Mounting hardware	One clamp per dipole - order separate

Technical Data

Configuration	Off-set	Gain - dBd	Weight - kg	Antenna height L - m	Wind load - kN
1 dipole	0.9 λ	0	2.0 / 3.0	0.220	0.017
2 dipoles		3.0	4.0 / 6.0	0.655	0.034
4 dipoles		7.5	8.0 / 12.0	1.525	0.068
6 dipoles		9.8	12.0 / 18.0	2.395	0.102
8 dipoles		11.0	16.0/ 24.0	3.265	0.136

- Gain: referred to half wave dipole, losses of power through cable or power dividers not included
- Weight: does not include mounting hardware, power dividers/phasing harness, brach feeder coaxial cables or mount poles
- Wind load: V = 160km/h
- Height: calculated at centre frequency of frequency range, alterations should be account for when using alternate frequencies

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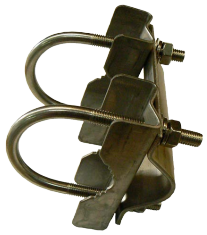
SKU: EB1-SS

2 units recommended

304 stainless steel parallel clamp

Boom: 20-40mm capability

Mount pole: 25-45mm capability



SKU: UB3-SS

304 stainless steel parallel clamp

Boom: 20-32mm capability

Mount pole: 20-50mm capability

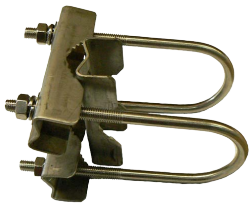
SKU: RB8

2 units recommended

Galvanised steel steel right-angle clamp

Boom: 20-50mm capability

Mount pole: 20-50mm capability



SKU: UB2-SS

304 stainless steel steel right-angle clamp

Boom: 20-50mm capability

Mount pole: 20-50mm capability

Suitable feeder coaxial cable and connectors

SKU: 7876-2

RU240UF ultra flexible stranded copper conductor, low loss coaxial cable

LMR-240-UF™ equivalent

(™ times microwave)

Available in 500m roll or alternatively request a custom cable assembly

SKU: NM-7987

N-type male crimp connector for RU240UF ultra flexible low loss, stranded conductor

Nickel plated

SKU: 7890

RU400 Solid copper conductor, low loss coaxial cable

CNT-400 / LMR-400™ equivalent

(™ times microwave)

Available in 100m, 300m, 500m rolls or alternatively request a custom cable assembly

SKU: NM-8226

N-type male crimp connector for RU400 low loss, solid conductor

Tri-metal plated

SKU: 7890-3

RU600 Solid copper conductor, low loss coaxial cable

LMR-600™ equivalent

(™ times microwave)

Available in 500m roll or alternatively request a custom cable assembly

SKU: NM-8226-2

N-type male crimp connector for RU600 low loss, solid conductor

Tri-metal plated

SKU: ZCG1250

1/2" corrugated shielding, foam dielectric coaxial cable

Available in per metre, 500m roll or alternatively request a custom cable assembly

SKU: NM1250

N-type male clamp connector for 1/2" flexible, corrugated shielded, coaxial cable

Tri-metal plated