



B44 Series

Wideband mast or flange mounted sidemount dipoles

UHF 400-520 MHz



The B44 series of sidemount dipoles are designed for UHF communication systems utilising 400-520 MHz suitable for Terrestrial Trunked Radio and UHF land mobile radio systems. The exceptionally broad bandwidth and reliable construction make sidemount dipoles perfect for use as a fixed position antenna as a short haul UHF link or fill in for UHF communications.

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

	B44 / B44-SS	B44F-SS*
Construction	Welded aluminium or welded 304 grade stainless	Welded 304 grade stainless steel only with PVC flange base
Frequency range	400-520 MHz - UHF, TETRA & LMR	
Bandwidth	Full frequency range stated - 120 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	
Passive Intermodulation 3rd order (2 x 20W)	better than -122dBc	
Cable & connector	N-type female fitted to 500mm MIL-SPEC RG58A/U as standard	
Dipole height	290mm	290mm
Weight	0.5kg aluminium 0.8kg stainless steel	0.9kg - stainless steel only
Projected area	0.011m ²	
Wind load at 160kph	1.274kg, 0.012kN	
Mount section	Aluminium - 300mm x Diameter: 32mm 304 Stainless steel - 300mm x Diameter: 25.5mm	
Mounting hardware order separate	Parallel: 1 x EB1-SS/UB3-SS Right-angle: 1 x RB8/UB2-SS	100mm diameter PVC mounting flange with 2 x 5mm holes
Mounting position recommended	Mount as high on your structure, mast or tower as possible using the appropriate mounting clamp/s.	



B44



B44SS



B44F-SS - with PVC flange mount



N-type female termination as standard or specify



MIL-SPEC RG58 base exit from mount section

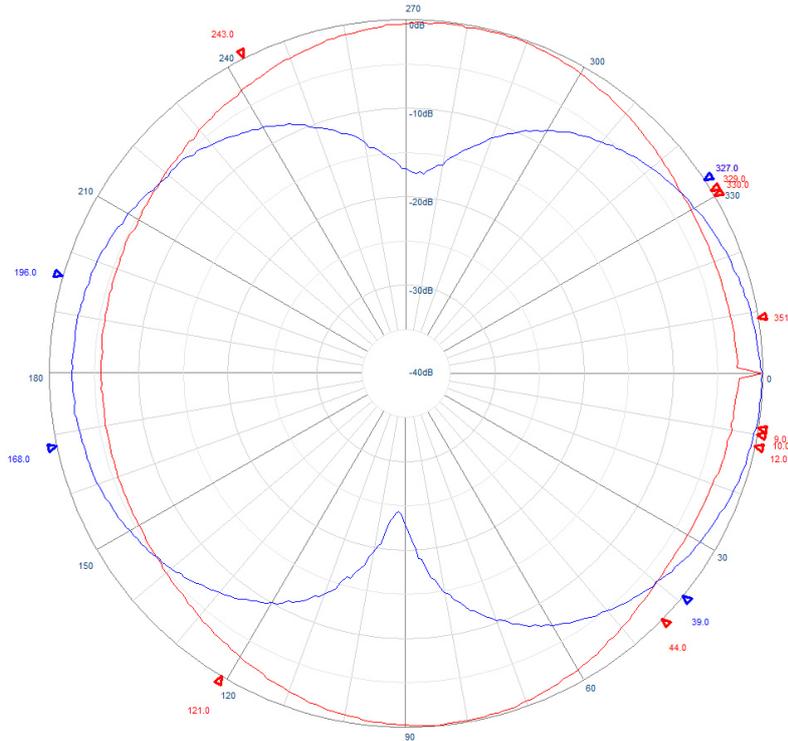


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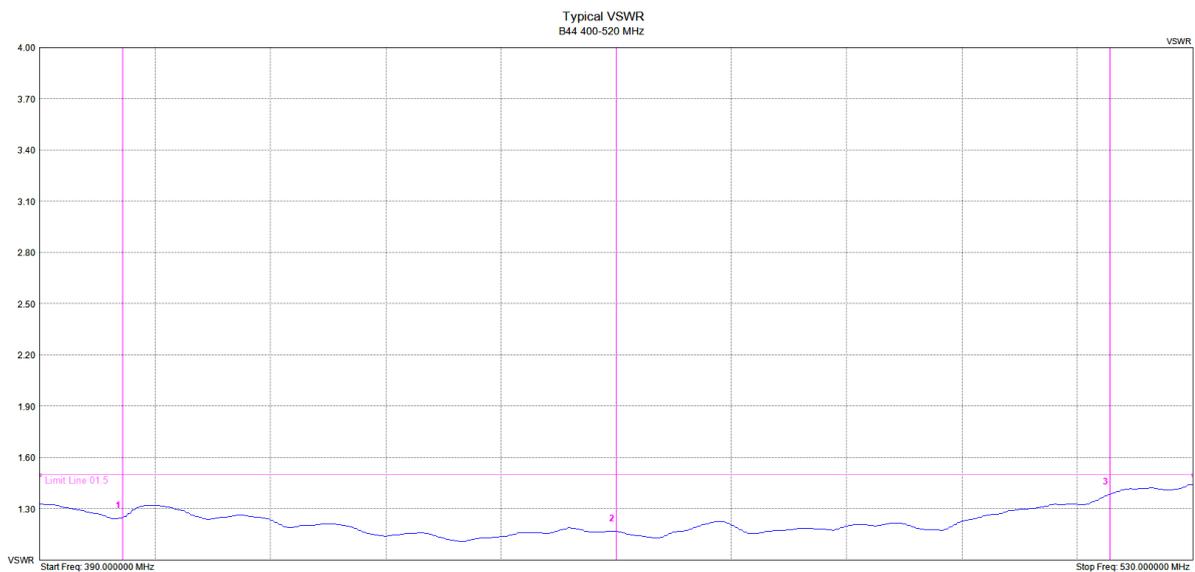
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In-stock
Ready to Ship
*Build to order item



Example radiation pattern



Mtr	Ref	Delta	Ref Freq	Ref Amp	Delta Freq	Delta Amp
1	<input type="checkbox"/>	<input type="checkbox"/>	400.000 MHz	1.25VSWR	--	--
2	<input type="checkbox"/>	<input type="checkbox"/>	460.000 MHz	1.17VSWR	--	--
3	<input type="checkbox"/>	<input type="checkbox"/>	520.000 MHz	1.38VSWR	--	--
4	<input type="checkbox"/>	<input type="checkbox"/>	--	--	--	--

Typical VSWR - B44 / B44F



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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 - B44/B44F

Configuration	Off-set	Gain - dBd	Weight - kg	Antenna height L - m	Wind load - kN
1 dipole	0.9 λ	0	0.6 / 0.9	0.290	0.012
2 dipoles		3.0	1.2 / 1.8	0.94	0.024
4 dipoles		7.5	2.4 / 3.6	2.25	0.048
6 dipoles		9.8	3.6 / 5.4	3.55	0.072
8 dipoles		11.0	4.8 / 7.2	4.85	0.096

- Gain: referred to half wave dipole, losses of power through cable or power dividers not included
- Gain: gain figures calculated utilising a rear mounting pole behind dipole/s.
- Weight: does not include mounting hardware, power dividers/phasing harness, brach feeder coaxial cables or mount poles
- Wind load: V = 160km/h



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SKU: EB1-SS
304 stainless steel parallel clamp
Boom: 20-40mm capability
Mount pole: 25-45mm capability
Requires minimum 2 units



SKU: UB3-SS
304 stainless steel parallel clamp
Boom: 20-32mm capability
Mount pole: 20-50mm capability

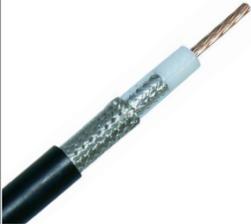


SKU: RB8
Galvanised steel steel right-angle clamp
Boom: 20-50mm capability
Mount pole: 20-50mm capability



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: 7890-2
RU400-UF ultra flexible, stranded conductor, low loss coaxial cable
LMR-400-UF™ equivalent
(™ times microwave)
Available in 500m roll or alternatively request a custom cable assembly



SKU: 8226
N-type male crimp connector for RU400/RU400-UF coaxial cables

Tri-metal plated



SKU: 7890
RU400 Solid copper conductor, low loss coaxial cable
CNT-400 / LMR-400™ equivalent
(™ times microwave)
Available in 100m, 300m, 500m roll or alternatively request a custom cable assembly



SKU: 8226-2
N-type male crimp connector for RU600 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: NM1250SF
N-type male clamp connector for 1/2" super flexible, helical shielded coaxial cable

Tri-metal plated



SKU: ZCG1250SF
1/2" super flexible helical shielded, foam dielectric coaxial cable

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