

B44 Series

Wideband mast or flange mounted sidemount dipoles

UHF 400-520MHz or 470-620MHz

This selection of sidemount dipoles are designed for UHF communication systems utilising 400-620MHz. Each model covers one of the designated bands. The exceptionally broad bandwidth and reliable construction make sidemount dipoles perfect for use as a fixed position antenna.

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

	B44	B44F-SS*	B44-HB*
Construction	Aluminium or 304 grade stainless	304 grade stainless steel only	Aluminium - only
Frequency range	UHF 400-520MHz		UHF 470-620MHz
Bandwidth	Full frequency range		
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	<-122dBc		
Cable & connector	N-type female fitted to 500mm MIL-SPEC RG58A/U as standard		
Dipole height	290mm	290mm	256mm
Weight	0.5kg aluminium 0.8kg stainless steel	0.6kg aluminium 0.9kg stainless steel	0.5kg aluminium 0.8kg stainless steel
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	Parallel: 1 x EB1-SS/ UB3-SS Right-angle: 1 x RB8/ UB2-SS
Mounting position recommended	Mount as high on your structure, mast or tower as possible using the appropriate mounting clamp/s.		



B44



B44F-SS - with PVC flange mount



B44SS



N-type female termination as standard or specify



MIL-SPEC RG58 base exit from mount section

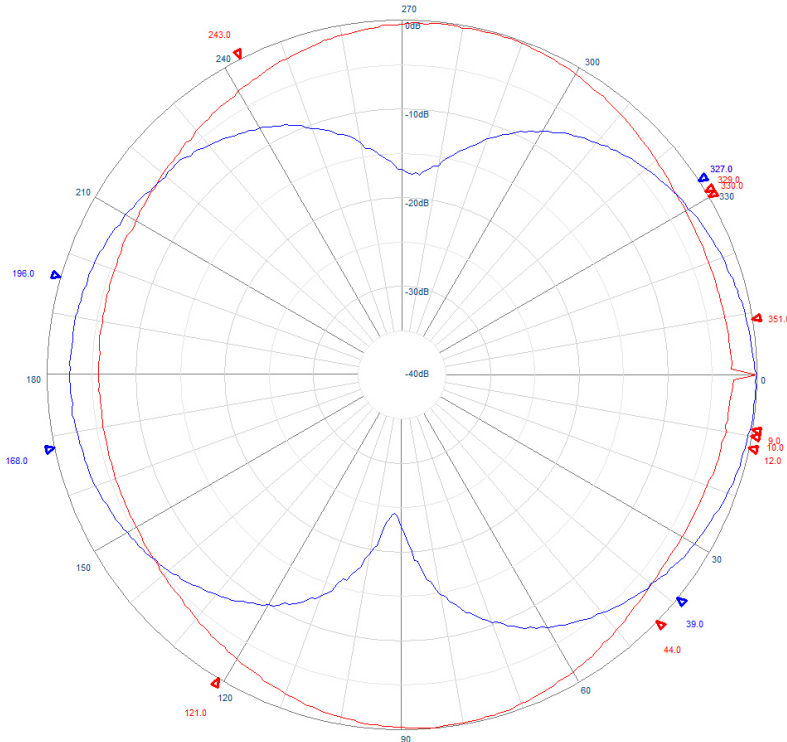


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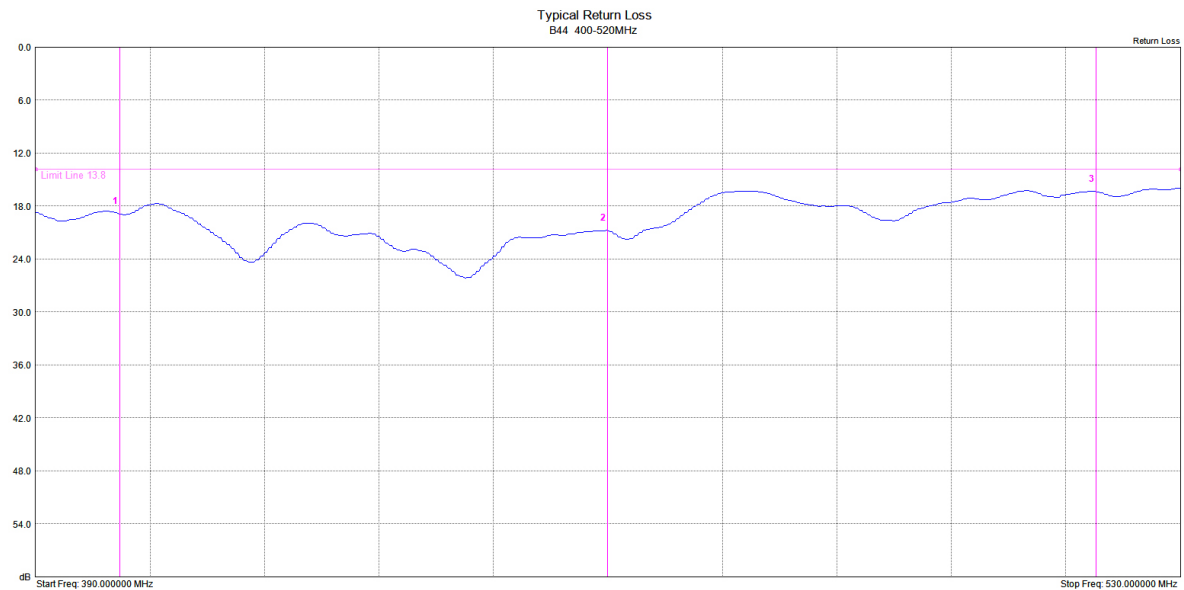
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In-stock
Ready to Ship
***Build to order item**



Example radiation pattern



Mix	Ref	Delta	Ref Freq	Ref Amp	Delta Freq	Delta Amp
1	<input type="checkbox"/>	<input type="checkbox"/>	400.219 MHz	18.90 dB	--	--
2	<input type="checkbox"/>	<input type="checkbox"/>	460.000 MHz	20.76 dB	--	--
3	<input type="checkbox"/>	<input type="checkbox"/>	519.781 MHz	16.42 dB	--	--
4	<input type="checkbox"/>	<input type="checkbox"/>	--	--	--	--

Typical Return Loss - 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
- Weight: does not include mounting hardware, power dividers/phasing harness, brach feeder coaxial cables or mount poles
- Wind load: V = 160km/h

Technical Data - B44-HB

Configuration	Off-set	Gain - dBd	Weight - kg	Antenna height L - m	Wind load - kN
1 dipole	0.9 λ	0	0.5 / 0.8	0.25	0.012
2 dipoles		3.0	1.0 / 1.6	0.8	0.024
4 dipoles		7.5	2.0 / 3.2	1.9	0.048
6 dipoles		9.8	3.0 / 4.8	3.0	0.072
8 dipoles		11.0	4.0 / 6.4	4.1	0.096

- 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



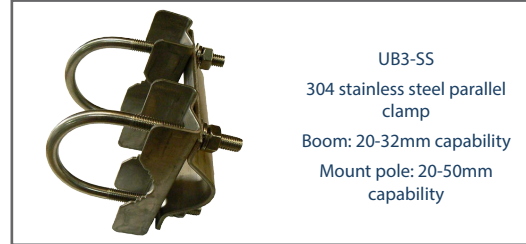
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EB1-SS - requires 2
304 stainless steel parallel
clamp
Boom: 20-40mm capability
Mount pole: 25-45mm
capability



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



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



UB2-SS
304 stainless steel right-
angle clamp
Boom: 20-50mm capability
Mount pole: 20-50mm
capability

Suitable feeder coaxial cable and connectors



MIL-SPEC RG213 stranded
conductor, solid PE dielectric
coaxial cable
P/N 7800

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



N-type male crimp connector
for MIL-SPEC RG213

P/N 7937

Tri-metal plated



RU400 Solid copper conductor,
low loss coaxial cable
CNT-400 / LMR-400™ equivalent
(* times microwave)
P/N 7890

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



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

P/N 8226

Tri-metal plated



1/2" super flexible helical
shielded, foam dielectric
coaxial cable
P/N ZCG1250SF

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



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

P/N NM1250SF

Tri-metal plated



1/2" corrugated shielding,
foam dielectric coaxial cable
P/N ZCG1250

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



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

P/N NM1250

Tri-metal plated