



B43 & B43SS

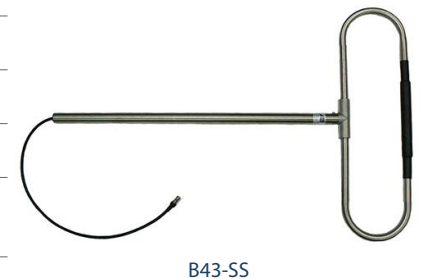
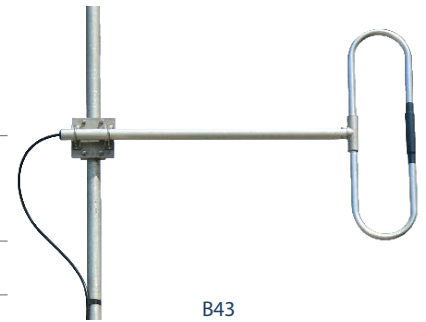
Broadband VHF sidemount dipole antennas VHF high band communications 136-174 MHz



The B43 model of sidemount dipoles are designed for wideband VHF communication systems utilising the full VHF high band frequency range 136-174 MHz. 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.

SKU	B43	B43SS
Construction	Corrosion resistant aluminium folded dipole, stand-off and external coaxial cable	304 stainless steel folded dipole, stand-off and external coaxial cable
Frequency range	136-174 MHz - VHF high band	
Bandwidth	Full frequency range stated - 26 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 (2 x 20W carrier)	<-120dBc	
Cable	1.0m RG213 stranded core cable rear exits from mount section	
Connector	N-type female fitted as standard or specify requirements	
Dipole height	885mm	
Weight	2.0kg	4.4kg
Projected area	0.063m ²	
Wind load at 160kph	7.69kg, 0.075kN	
Mount section	1.0m long x 40mm diameter	
Mounting hardware order separate	B43: 1 x Y2300 or Y2300-L B43SS: 1 x Y2300SS or Y2300SS-L	
Mounting position recommended	Mount as high on your structure, mast or tower as possible using the appropriate mounting clamps.	
Installation tools required	8mm or 5/16" spanner for dipole to mount section securing. Self-amalgamating butyl rubber tape and uPVC electrical tape for termination sealing.	

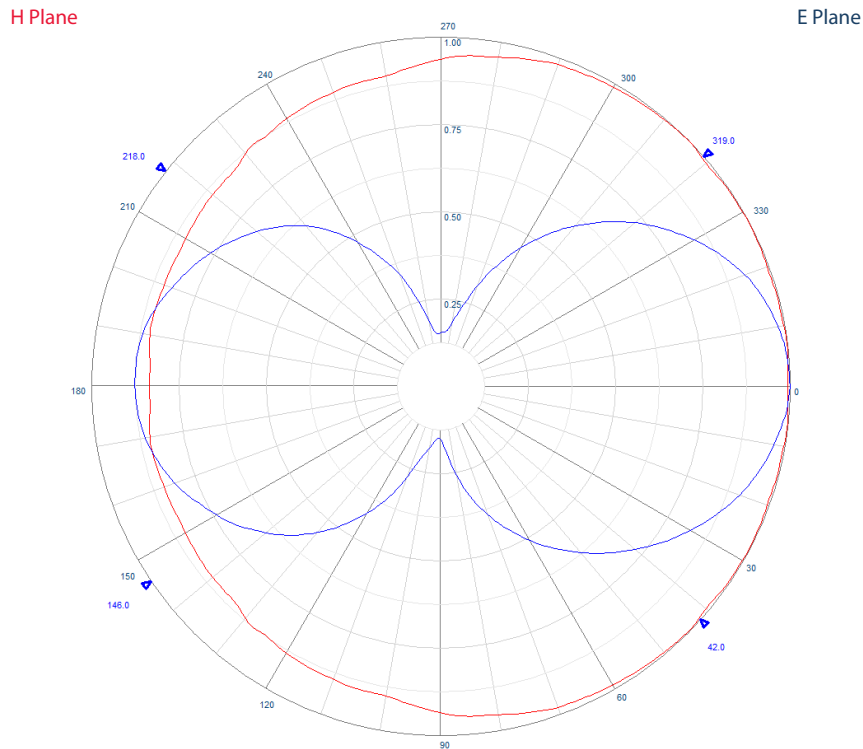


N-type female fitted as standard

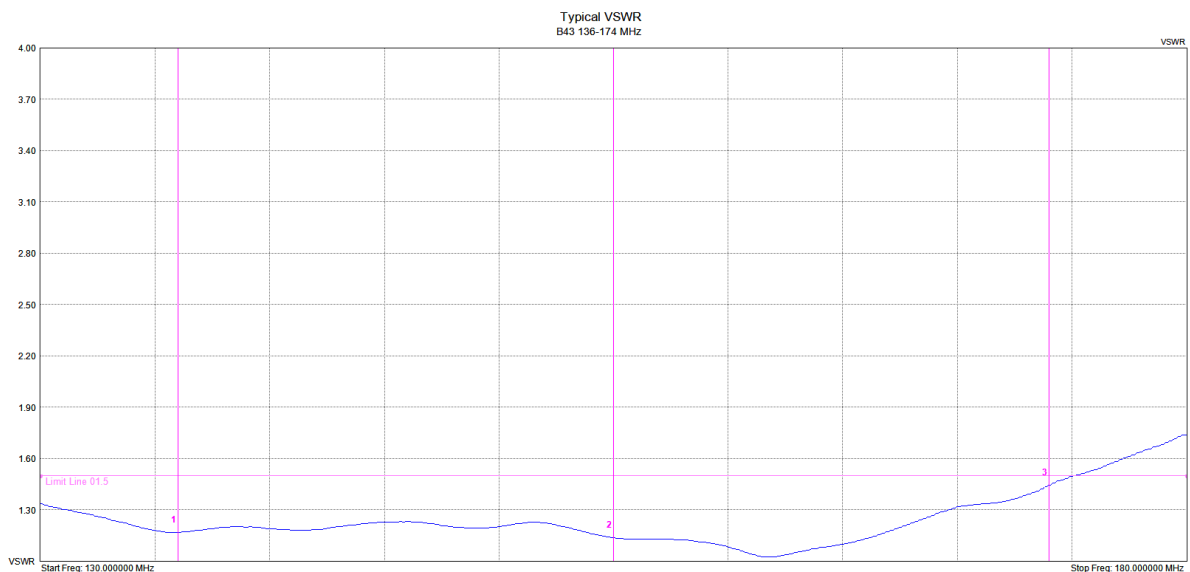


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Example radiation pattern



Mtr	Ref	Delta	Ref Freq	Ref Amp	Delta Freq	Delta Amp
1	<input type="checkbox"/>	<input type="checkbox"/>	136.000 MHz	1.17VSWR	--	--
2	<input type="checkbox"/>	<input type="checkbox"/>	155.000 MHz	1.14VSWR	--	--
3	<input type="checkbox"/>	<input type="checkbox"/>	174.000 MHz	1.45VSWR	--	--
4	<input type="checkbox"/>	<input type="checkbox"/>	--	--	--	--

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	0.9λ	0	2.0 / 4.4	0.885	0.075
2 dipoles		3.0	4.1 / 8.8	2.4	0.15
4 dipoles		7.5	8.3 / 17.6	5.3	0.30
6 dipoles		9.8	12.5 / 26.4	8.2	0.45
8 dipoles		11.0	16.7 / 35.2	11.1	0.60


- 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

Array requirements - order separate



Custom cable branch feeders
Length and termination determined by model and power divider spec.
See following page for cable type recommended

+



Multi-termination power divider/splitter
Specify centre frequency when ordering.
Multi-input/output connector configuration available.
1.1:1 VSWR
Includes mounting hardware



SKU: PDD32 / PDD34
VHF Coaxial phasing harness
Specify centre frequency when ordering.
2-way or 4-way configuration available.
1.5:1 VSWR



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Suitable mounting hardware



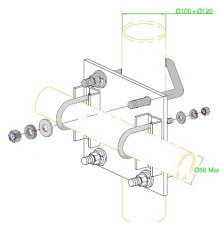
SKU: Y2300
Galvanised steel right-angle round boom Yagi clamp
SKU: Y2300SS - 304 stainless steel
Boom: 30-50mm capability
Mount pole: 30-50mm capability



SKU: Y2300-L
Galvanised steel large right-angle round boom Yagi clamp
SKU: Y2300SS-L - 304 stainless steel
Boom: 32-50mm capability
Mount pole: 40-75mm capability



SKU: Y2300-XL
Galvanised steel extra large right-angle round boom Yagi clamp
SKU: Y2300SS-XL - 304 stainless steel
Boom: 32-50mm capability
Mount pole: 50-90mm capability



SKU: C-125
Galvanised steel extra large right-angle round boom Yagi clamp
Boom: 32-50mm capability
Mount pole: 100-125mm capability

Suitable feeder coaxial cable and connectors



SKU: 7890
RU400 Solid copper conductor, low loss coaxial cable
CNT-400 / LMR-400™ equivalent
(™ times microwave)
SKU: 7890-2 - Ultra flexible
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: ZCG1250SF
1/2" super flexible helical shielded, foam dielectric coaxial cable
Available in per metre, 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: 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