

B42 and B42SS

Broadband sidemount dipole

Airband 118-137MHz



The B42 sidemount dipole is for Airband communications across the entire 118-137MHz range. The broad bandwidth and reliable construction make a sidemount dipole perfect for use as a fixed position antenna.

Traditionally folded dipoles are mounted to a vertical pole on a mast. Pattern formation and gain can be varied by altering dipole to mast spacing, or by mounting in stack array formations.

Mounting hardware, coaxial feeder cable, connectors and other installation accessories are all available separately.



Single B42 sidemount dipole with 0dBd gain



4-bay B42 sidemount dipole array with increased gain performance of 7dBd

	B42	B42SS
Construction	Corrosion resistant aluminium	304 grade stainless steel
Frequency range	VHF Airband 118-137MHz	
Bandwidth	Full frequency range	
VSWR	<1.5:1	
Tuning	Factory	
Gain	0dBd for a single bay, stacking increases gain	
Maximum power	250 Watts	
Impedance - nominal	50 Ohms	
DC grounding	Yes	
Polarisation	Vertical	
Cable	1.0 metre MIL-SPEC RG213 rear exit of mount section	
Connector	N-type female fitted to cable tail or specify requirements	
Dipole height	1.035 metres	
Weight - per dipole	2.5kg	3.8kg
Projected area	0.071m ² - per single dipole	
Wind load at 160kph	0.084kN, 8.603kg - per single dipole	
Mount section	1.0m x 40mm - aluminium	1.0m x 40mm - 304 stainless steel
Mounting hardware order separate	Parallel: 1 x UAM180L or UAM180UNI Right-angle: 1 x Y2300 or 2 x UAM90L	Parallel: 1 x UAM180L or UAM180UNI Right-angle: 1 x Y2300 or 2 x UAM90L



N-type female fitted to external MIL-SPEC RG213 as standard or specify requirements



UAM180L



UAM180UNI



Y2300 / Y2300-SS

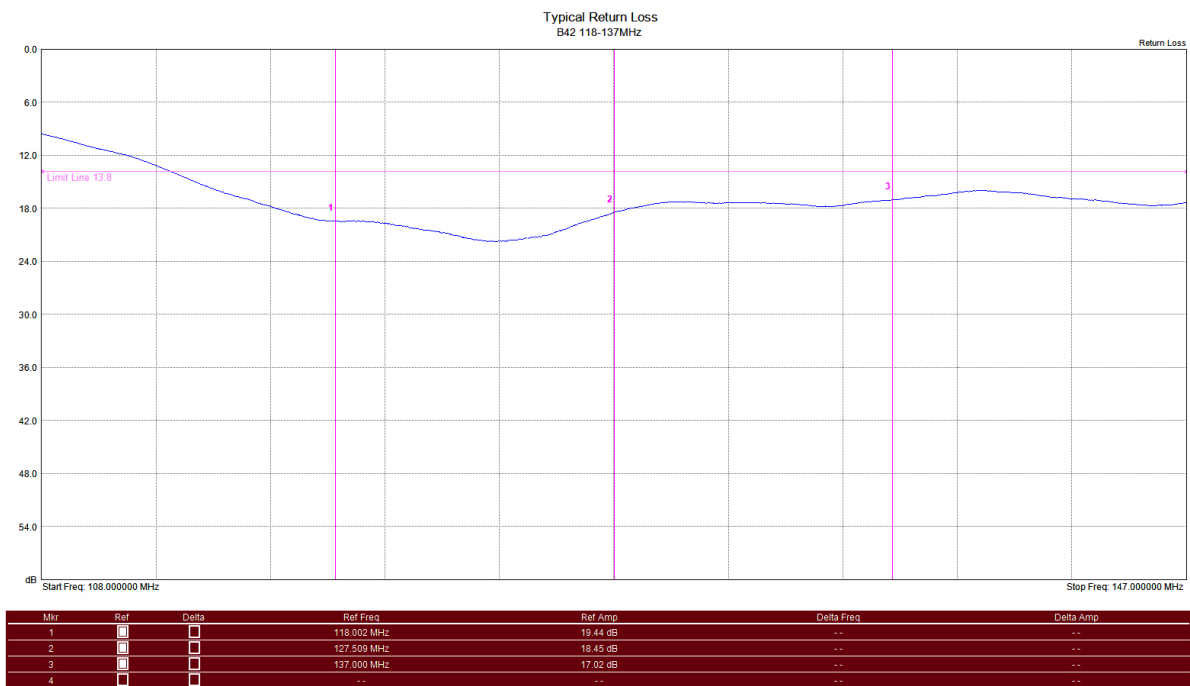


UAM90L



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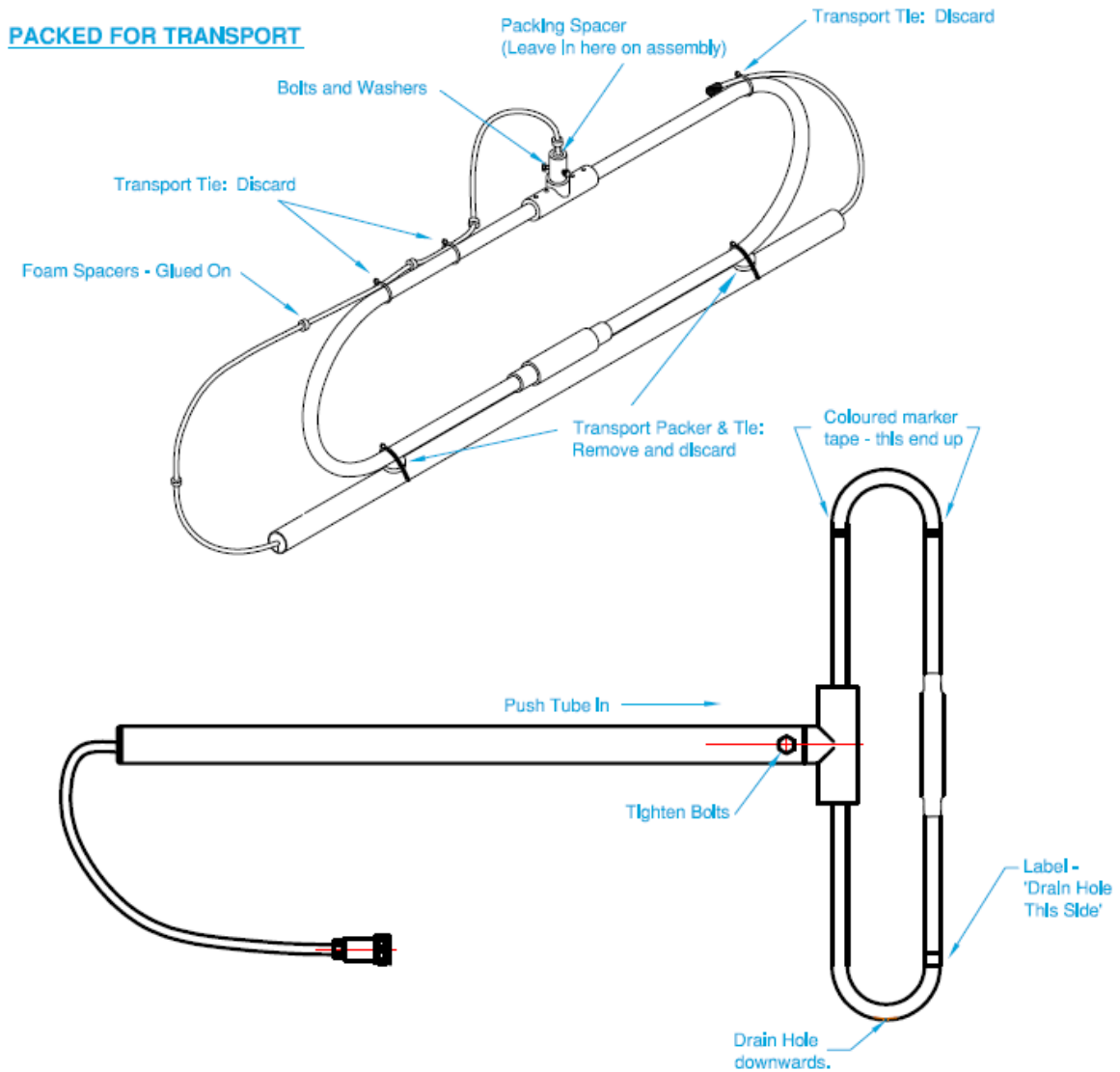


Typical Return Loss



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TO ASSEMBLE ANTENNA:

Remove and discard packing as shown above,
Hold Connector and carefully pull Cable through Mounting Tube, fitting each
Spacer on Cable Into Tube.
Push Mounting Tube fully home Into In Dipole Frame Tee-piece and bolt
home tight
For vertical mounting, make sure Drain Hole is downwards.,



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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	1/2 λ	0	2.5 / 3.8	1.03	0.84
2 dipoles		3.0	5.2 / 7.8	3.63	0.168
4 dipoles		7.5	10.5 / 15.8	8.83	0.336
6 dipoles		9.8	16.0 / 23.8	14.03	0.504
8 dipoles		11.0	21.4 / 31.8	19.23	0.672

- Gain: referred to half wave dipole, losses of power through cable or power dividers not included
- Weight: does not include mounting hardware, power dividers, brach feeder coaxial cables or mount poles
- Wind load: V = 160km/h