



B19-SAR-164

Ruggedised omnidirectional broadband coaxial dipole antenna

VHF high band communications 148-174 MHz



The B19-SAR-164 VHF broadband ruggedised coaxial dipole provides a high strength, high quality fixed position antenna solution. It is ideal for omni-directional low power transmit and receive applications up to 100 Watts. Ideal for tough conditions and high load environments.

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

Construction	Ruggedised parallel fibreglass radome, 304 stainless steel mount section and external tri-metal plated termination
Frequency range	148-174 MHz - VHF high band
Maximum bandwidth	Full frequency range - 26 MHz
VSWR	<1.5:1 at centre and <1.8:1 on edges
Tuning	Factory
Gain	0 dBd - unity
Maximum power	100 Watts
Impedance - nominal	50 Ohms
DC grounding	Yes
Polarisation	Vertical
H Plane	360° omnidirectional, ± 0.5 dBd
E Plane	66°
Connector	N-type female in base of mount section - no cable
Height	1.9 metres
Weight	2.4kg
Projected area	0.065m ²
Wind load at 160kph	7.857kg, 0.077kN
Mount section	480mm x 50.8mmø - 304 stainless steel
Mounting hardware order separate	Parallel: 2 x UAM180L or 2 x UAM180UNI Right-angle: 2 x UAM90L or 2 x UAM90UNI Side/wall mounting: 2 x NSM-223
Mounting position recommended	Mount as high as possible on your structure, mast or tower using the appropriate mounting clamps
Installation tools required	Adjustable spanners for mounting clamp attachment. Self-amalgamating butyl rubber tape and uPVC electrical tape for termination sealing.



Aluminium protection cap also reduces unwanted vertical signal loss



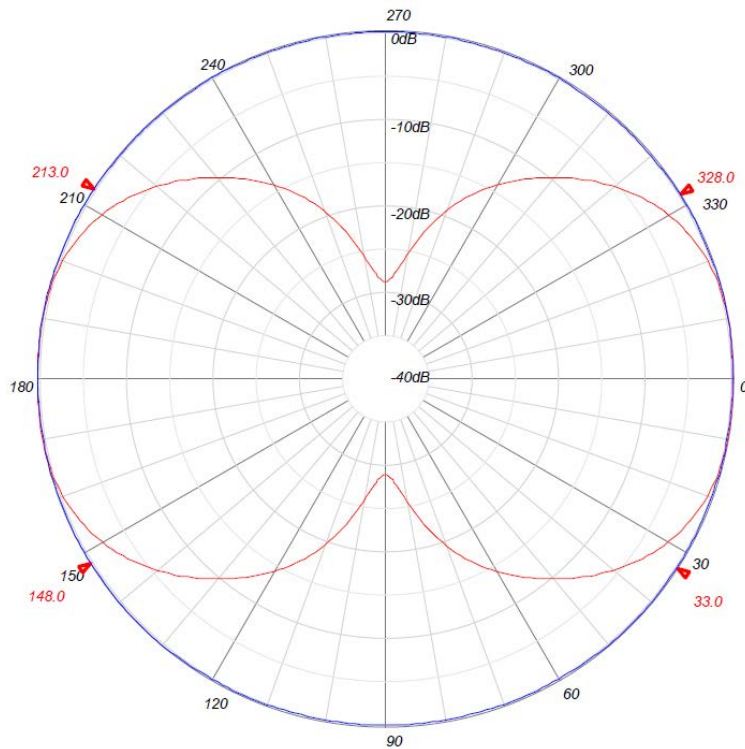
N-type female connector jack in base of mount section

An inverted model is also available, see [B19-SAR-164-INV](#)

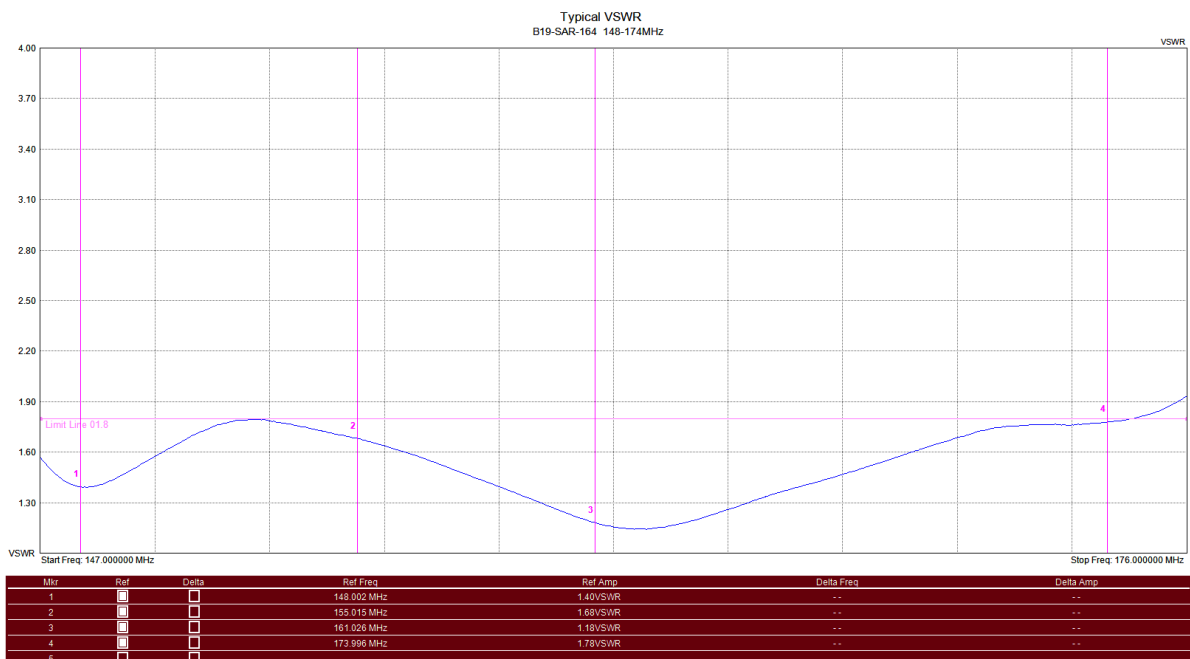


B19-SAR-164

Ruggedised omnidirectional broadband coaxial dipole antenna
VHF high band communications 148-174 MHz



Example radiation pattern



Typical VSWR



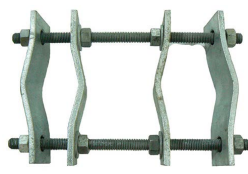
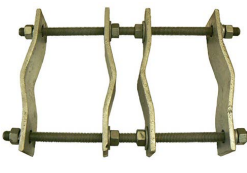


B19-SAR-164

Ruggedised omnidirectional broadband coaxial dipole antenna VHF high band communications 148-174 MHz



Suitable mounting hardware

 <p>SKU: UAM180L 2 units recommended Galvanised steel heavy-duty parallel clamp Boom: 40-75mm capability Mount pole: 40-75mm capability</p>	 <p>SKU: UAM180UNI 2 units recommended Galvanised steel large parallel clamp Boom: 40-70mm capability Mount pole: 40-90mm capability</p>
 <p>SKU: UAM180UNIL 2 units recommended Galvanised steel extra large parallel clamp Boom: 40-90mm capability Mount pole: 60-115mm capability</p>	 <p>SKU: UAM90L 2 units recommended Galvanised steel right-angle clamp Boom: 40-75mm capability Mount pole: 40-75mm capability</p>
 <p>SKU: UAM90UNI 2 units recommended Galvanised steel large right-angle clamp Boom: 40-70mm capability Mount pole: 40-90mm capability</p>	 <p>SKU: UAM90LL 2 units recommended Galvanised steel extra large right-angle clamp Boom: 60-115mm capability Mount pole: 60-115mm capability</p>

Suitable feeder coaxial cable

 <p>SKU: 7890 RU400 Solid copper conductor, low loss coaxial cable CNT-400 / LMR-400™ equivalent (* times microwave) SKU: 7890-3 - RU400-UF ultra flexible Available in 100m, 300m, 500m roll or alternatively request a custom cable assembly</p>	 <p>SKU: NM-8226 N-type male crimp connector for RU400 low loss, solid conductor Tri-metal plated</p>
 <p>SKU: 7890-2 RU600 Solid copper conductor, low loss coaxial cable CNT-600 / LMR-600™ equivalent (* times microwave) Available in 500m roll or alternatively request a custom cable assembly</p>	 <p>SKU: NM-8226-2 N-type male crimp connector for RU600 low loss, solid conductor Tri-metal plated</p>
 <p>SKU: ZCG1250 1/2" corrugated shielding, foam dielectric coaxial cable Available in per metre, 500m roll or alternatively request a custom cable assembly</p>	 <p>SKU: NM1250 N-type male clamp connector for 1/2" flexible, corrugated shielded, coaxial cable Tri-metal plated</p>