



Omni-directional VHF collinears

Light-duty to commercial and inverted

VHF high band 140-174 MHz



These VHF omni-directional fixed position collinears are designed for commercial paging, trunking and general communication systems operating within the VHF high band 140-174 MHz frequency range.

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

	G21	G22	G23	G25
Construction	White fibreglass radome, aluminium mount section and tri-metal plated termination - G23-INV inverted version available			
Service	Standard Ext. handle model G21-R	Commercial	Commercial 'Inverted available' Ruggedised model G23-R	Commercial
Frequency range	148-174 MHz - VHF high band			
Maximum bandwidth	Any 1%	Any 3%	Any 4%	Any 3%
VSWR	<1.5:1 across specified bandwidth			
Tuning	Factory			
Gain	3 dBd	6 dBd	3 dBd	4.5 dBd
Maximum power	250 Watts - or higher power ratings can be supplied upon request			
Impedance - nominal	50 Ohms			
DC grounding	Yes			
Polarisation	Vertical			
H Plane	360° omnidirectional, ± 0.5dB			
E Plane	32°	16°	32°	26°
Connector	N-type female in base of mount section - no cable			
Passive IM 3rd order (2x20w)	<120dBc			
Height	3.5 metres	5.6 metres	3.5 metres	4.5 metres
Weight	4.0kg	13.0kg	4.5kg	6.5kg
Projected area	0.100m ²	0.17m ²	0.113m ²	0.158m ²
Wind load at 160kph	12.079.0kg, 0.118kN	20.538kg, 0.201kN	13.64kg, 0.134kN	19.158kg, 0.188kN
Mount section	500mm x 40mm	595mm x 48.4mm		
Mounting hardware order separate	Parallel: 2 x UAM180L or UAM180UNI or Right-angle: 2 x UAM90L or UAM90UNI			



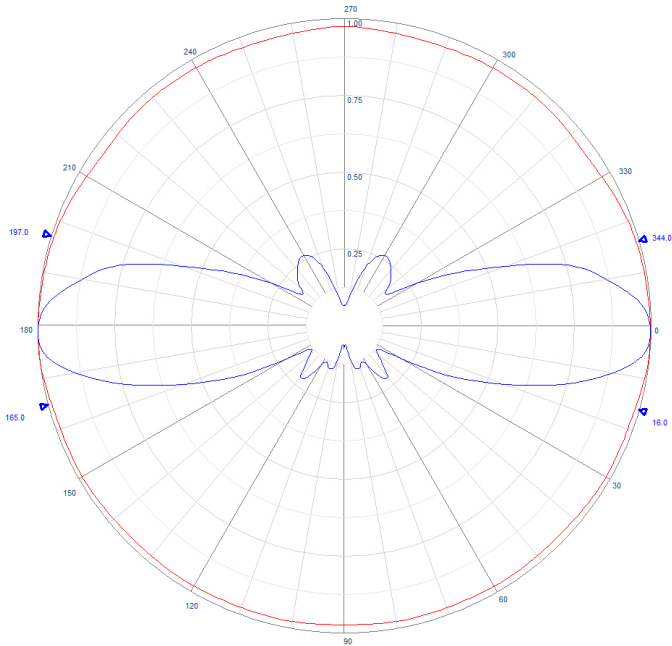
N-type female jack connector at base of mounting section



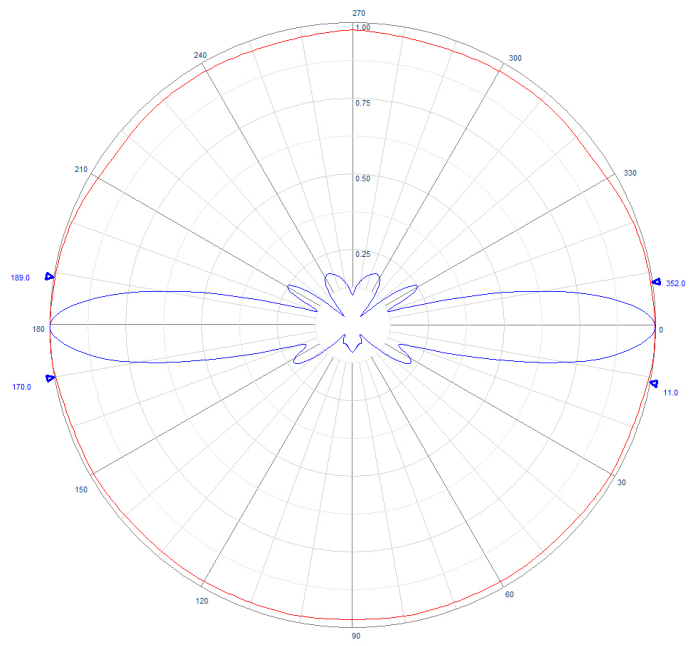
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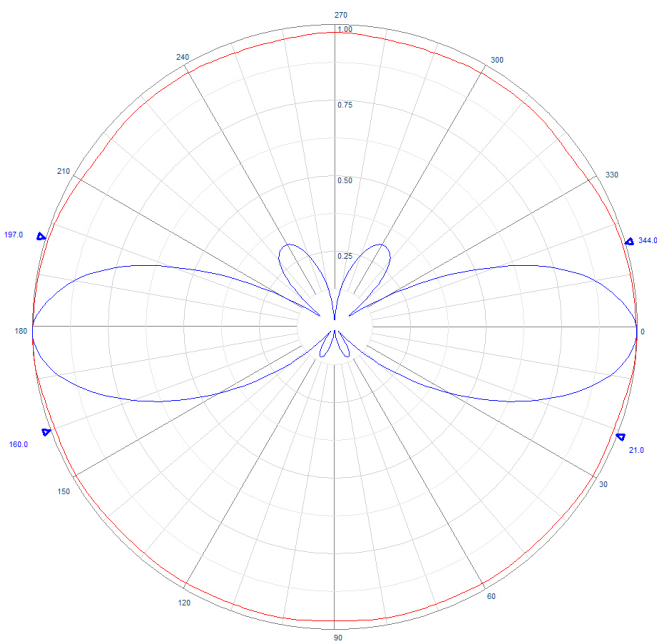
VHF high band 140-174 MHz



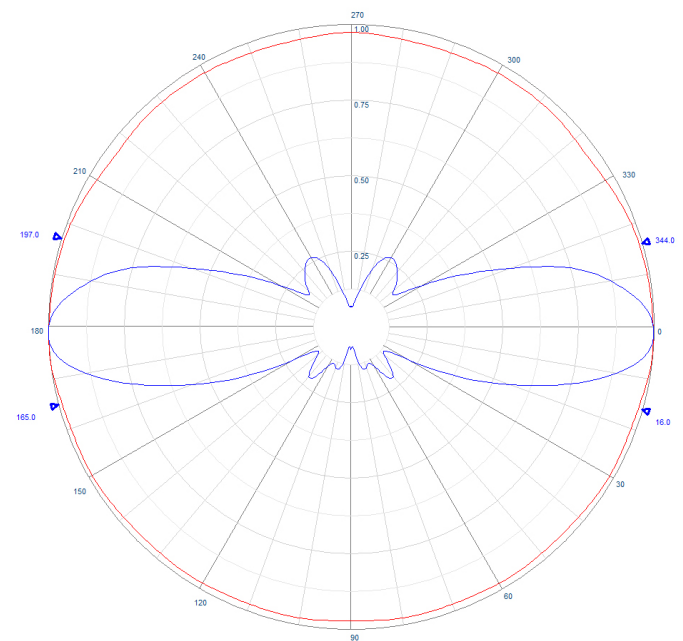
Example radiation pattern - G21



Example radiation pattern - G22



Example radiation pattern - G23



Example radiation pattern - G25



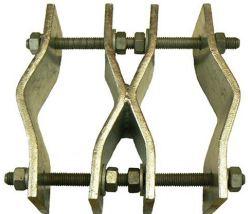
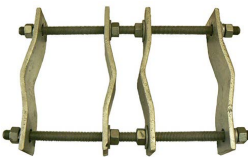
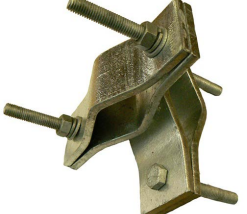

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Suitable mounting hardware

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

Suitable feeder coaxial cable and connectors

 <p>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</p>	 <p>N-type male crimp connector for RU400 low loss, solid conductor P/N 8226 Tri-metal plated</p>
 <p>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</p>	 <p>N-type male clamp style plug connector for 1/2" helical shielded, foam dielectric, super flexible cable P/N NM1250SF Tri-metal plated</p>
 <p>1/2" corrugated shielding, foam dielectric coaxial cable P/N ZCG1250 Available in per metre, 500m roll or alternatively request a custom cable assembly</p>	 <p>N-type male clamp connector for 1/2" flexible, corrugated shielded, coaxial cable P/N NM1250 Tri-metal plated</p>