



## M55SS-MIL

### Ruggedised omnidirectional monocone with enclosed termination VHF Air Band 118-137 MHz



Designed and manufactured for naval and land base military applications, the M55SS-MIL is suited for mounting to either a naval vessel, vehicle or structure. With an omni-directional radiation pattern and integral ground plane, this monocone produces a low angle of radiation making it comparable with centre-fed dipoles.

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

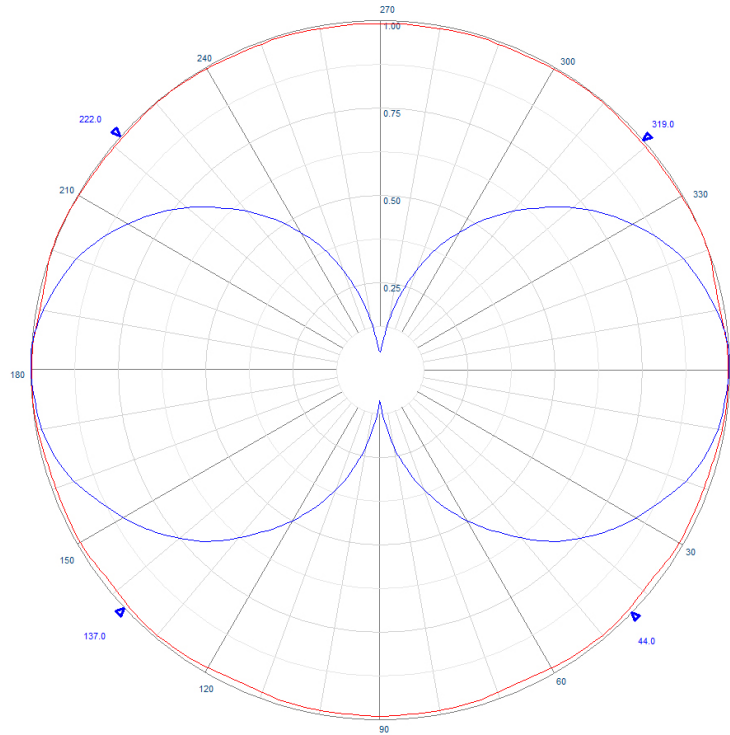
Construction	Grey radome, 316 grade stainless steel radials and 316 stainless steel mount section
Frequency	118-137 MHz - VHF Air Band
Bandwidth	Full frequency range stated - 19 MHz
VSWR	<1.5:1
Tuning	Factory
Gain	0 dBd - unity
Maximum power	500 Watts
Impedance - nominal	50 Ohms
DC grounding	Yes
Polarisation	Vertical
H Plane	360° omni-directional, $\pm 0.5$ dBd
E Plane	65° - vertical beamwidth
Connector	Weather sealed N-type female at base of mount section
Height	1.7 metres
Weight	4.6kg
Projected area	0.076m <sup>2</sup>
Wind load at 160kph	0.09kN, 9.199kg
Mounting section	38mm x 300mm - 316 stainless steel
Mounting hardware order separate	Parallel: 2 x UAM180L or UAM180UNI Right-angle: 2 x UAM90L or UAM90UNI Side/wall mount: 2 x NSM-218
Mounting position recommended	Mount as high on your vessel, structure mast or tower as possible using the appropriate mounting clamps
Installation tools required	Tommy bar for radial securing included Allen key for radial grub screw securing included 8mm spanner for weatherproof cover securing 24mm spanner for cable gland tightening



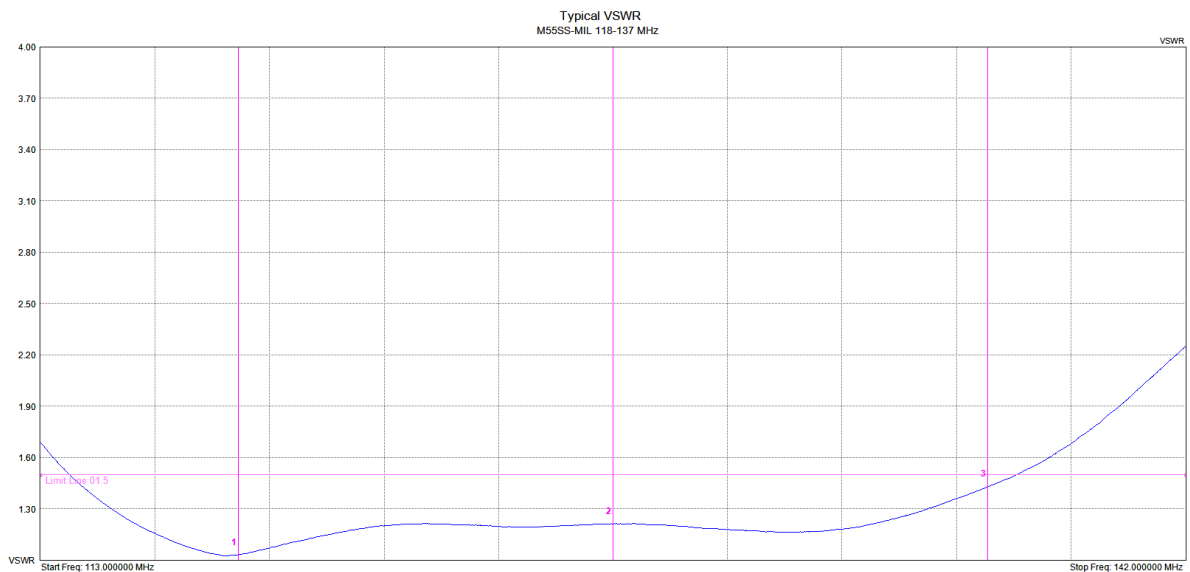


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Example radiation pattern



Mbr	Ref	Delta	Ref Freq	Ref Amp	Delta Freq	Delta Amp
1	<input type="checkbox"/>	<input type="checkbox"/>	118.000 MHz	1.031VSWR	--	--
2	<input type="checkbox"/>	<input type="checkbox"/>	127.500 MHz	1.211VSWR	--	--
3	<input type="checkbox"/>	<input type="checkbox"/>	137.000 MHz	1.431VSWR	--	--
4	<input type="checkbox"/>	<input type="checkbox"/>	--	--	--	--

Typical VSWR





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### Suitable mounting hardware



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



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



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

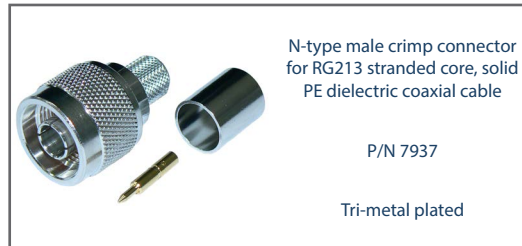


NSM-218 - requires 2  
Toughened white nylon wall  
mount  
Boom: 38mm capability  
13mm mount hole required

### Suitable feeder coaxial cable and connectors



RG213 stranded core, 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 RG213 stranded core, solid  
PE dielectric coaxial cable  
P/N 7937  
Tri-metal plated



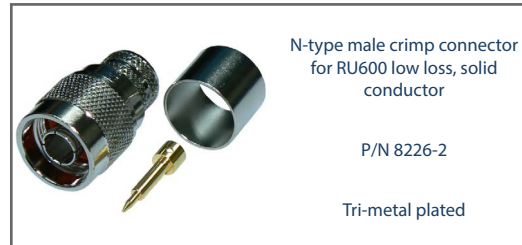
RU400 Solid copper conductor,  
low loss coaxial cable  
CNT-400 / LMR-400™ equivalent  
(\* times microwave)  
P/N 7890  
Available in 100m, 300m or  
500m rolls or alternatively  
request a custom cable  
assembly



N-type male crimp connector  
for RU400 low loss, solid  
conductor  
P/N 8226  
Tri-metal plated



RU600 Solid copper conductor,  
low loss coaxial cable  
LMR-600™ equivalent  
(\* times microwave)  
P/N 7890-3  
Available in 500m roll or  
alternatively request a custom  
cable assembly



N-type male crimp connector  
for RU600 low loss, solid  
conductor  
P/N 8226-2  
Tri-metal plated



1/2" super flexible helical  
shielded, foam dielectric  
coaxial cable  
P/N ZCG1250SF  
Available in per metre, or 500m  
rolls or alternatively request a  
custom cable assembly

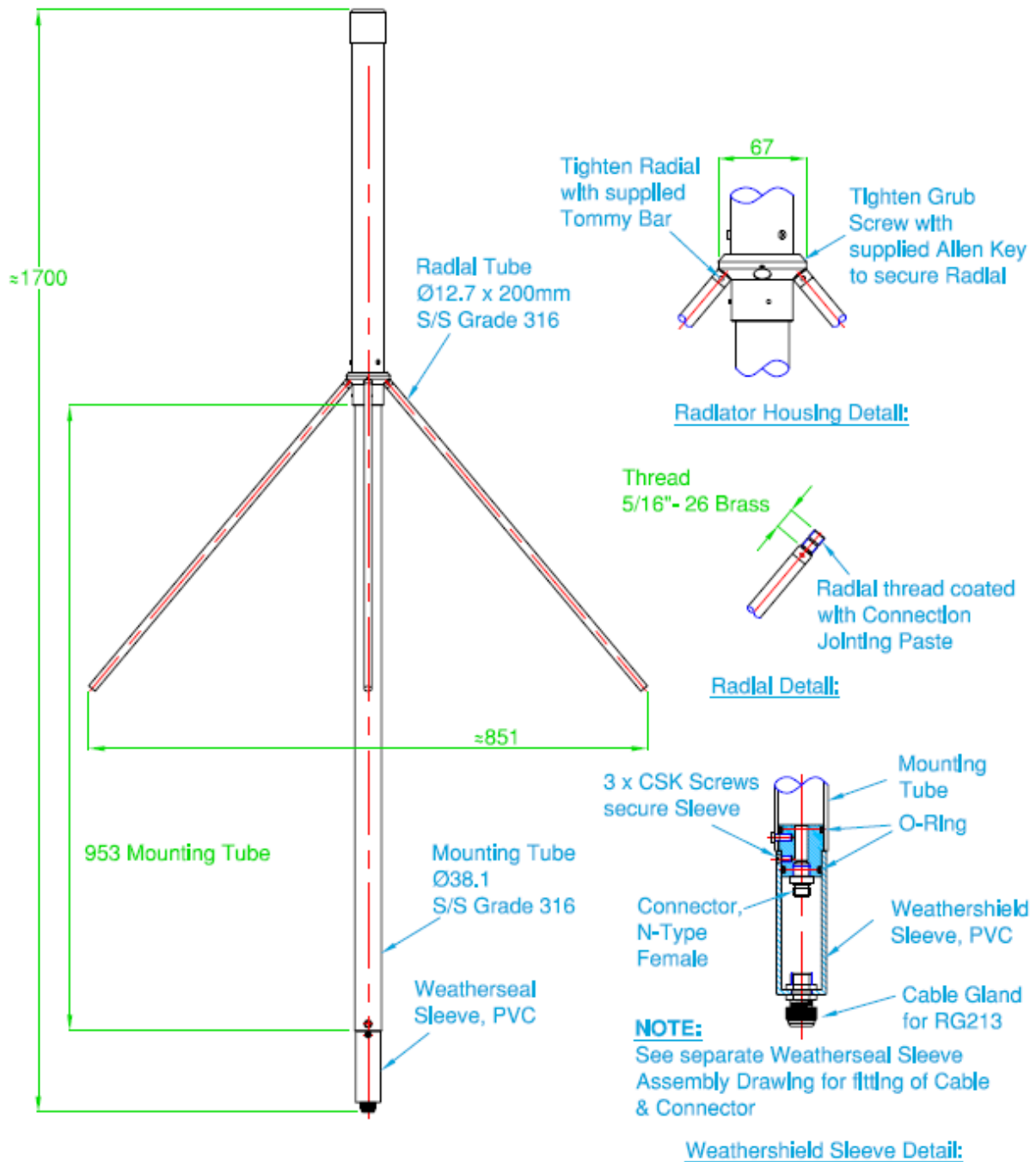


N-type male clamp connector  
for 1/2" super flexible, helical  
shielded coaxial cable  
P/N NM1250SF  
Tri-metal plated



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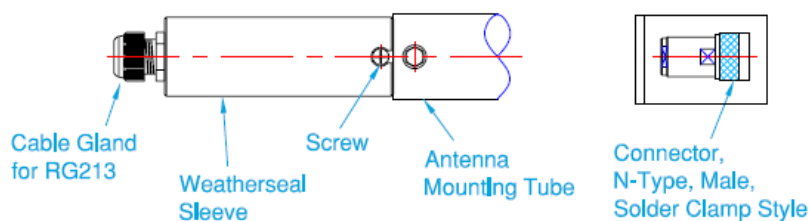




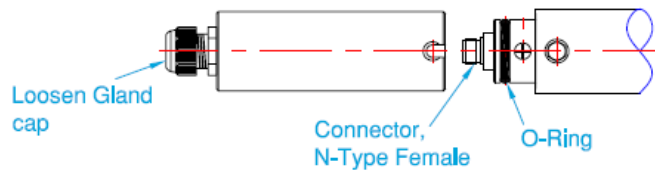
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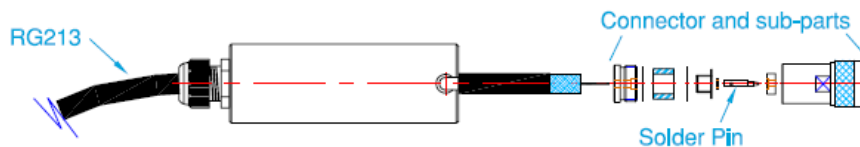
### INSTALLATION GUIDE - WEATHERSEAL SLEEVE FOR M55SS-MIL & M56SS-MIL SERIES MONOCONE ANTENNAS



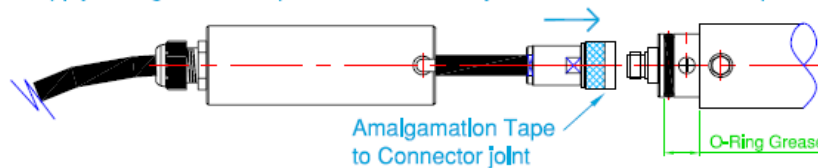
1. Loosen Screws to remove Sleeve from Antenna and loosen Cable Gland cap.



2. Feed RG213 through Sleeve, trim Cable end and fit Connector.



3. Fit Cable assembly to Antenna Connector.  
Apply plenty of O-Ring Grease to O-Ring & the area above the O-Ring.  
Apply Amalgamation Tape to the Connector joint for additional moisture proofing.



4. Slide Sleeve up to Mounting Tube. Tighten Screws to secure Sleeve to Antenna then tighten Cable Gland cap.

