



MGP-3850N

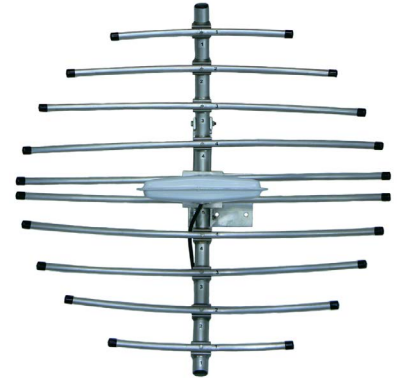
Highly directional mini Grid-Pack point-to-point STL link UHF 820-960 MHz



The MGP-3850N UHF mini grid-pack antenna provides exceptionally broad bandwidth with a highly directional radiation pattern with minimal side lobes.

This makes a grid-pack the best choice for use as a point-to-point broadcast/telecomms link.

Coaxial feeder cable, connectors and other installation accessories are all available separately.



Construction	10 element corrosion resistant aluminium rear screen and radome enclosed launcher
Frequency range	UHF 820-960 MHz centred for 850 MHz
Bandwidth	Full frequency range
VSWR	Average: <1.5:1; Maximum <1.6:1
Tuning	Factory
Gain	15.4dBic - mid band
Maximum power	100 Watts
Impedance - nominal	50 Ohms
DC grounding	Yes
Polarisation	Mount horizontal or vertical as required
H Plane	24°
E Plane	25.3°
Front-to-back ratio	20 dB
Cable	400mm RU400 low loss, rear exit from launcher
Connector	N-type female jack fitted to external cable or specify requirements
Dish dimensions	0.95 metres x 0.96 metres - assembled - (3' diameter)
Weight	10.5kg
Projected area	0.2m ²
Wind load at 160kph	26.0kg, 0.21kN
Mounting hardware	2 x U-bolts, 50-75mm capability - supplied
Installation tools required	10mm, 13mm and 19mm spanners for antenna assembly
Warranty	2 Years

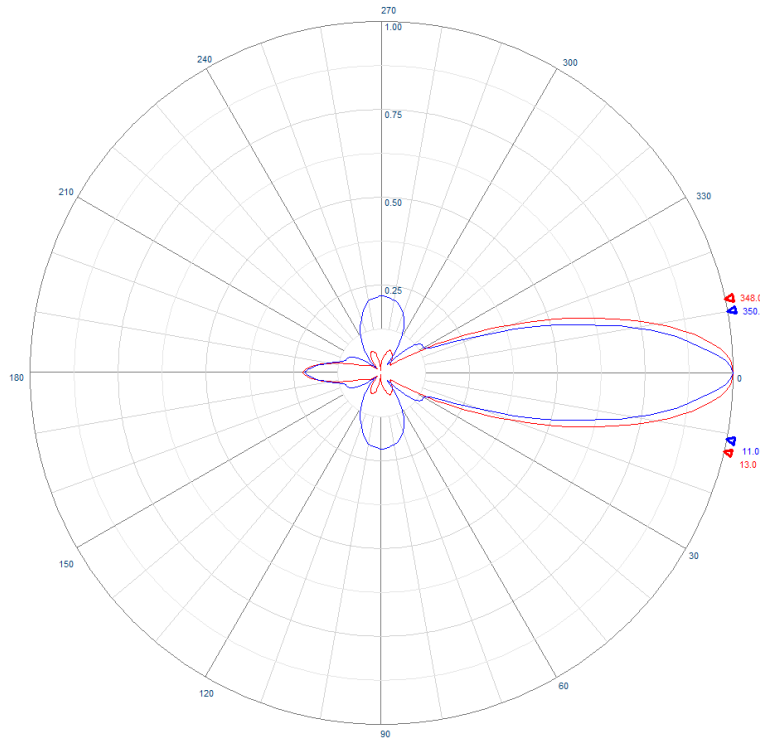
Other Models Available

MGP-4650N	1.2m - 520-670MHz
MGP-4750N	1.2m - 700-820MHz
MGP-4850N	1.2m - 820-960MHz
MGP-6400N	1.8m - 400-520MHz
MGP-6750N	1.8m - 700-820MHz
MGP-6850N	1.8m - 820-960MHz
TDJ-1500N	1.2m - 1.4-1.55GHz
MGP-1500N	1.8m - 1.4-1.55GHz

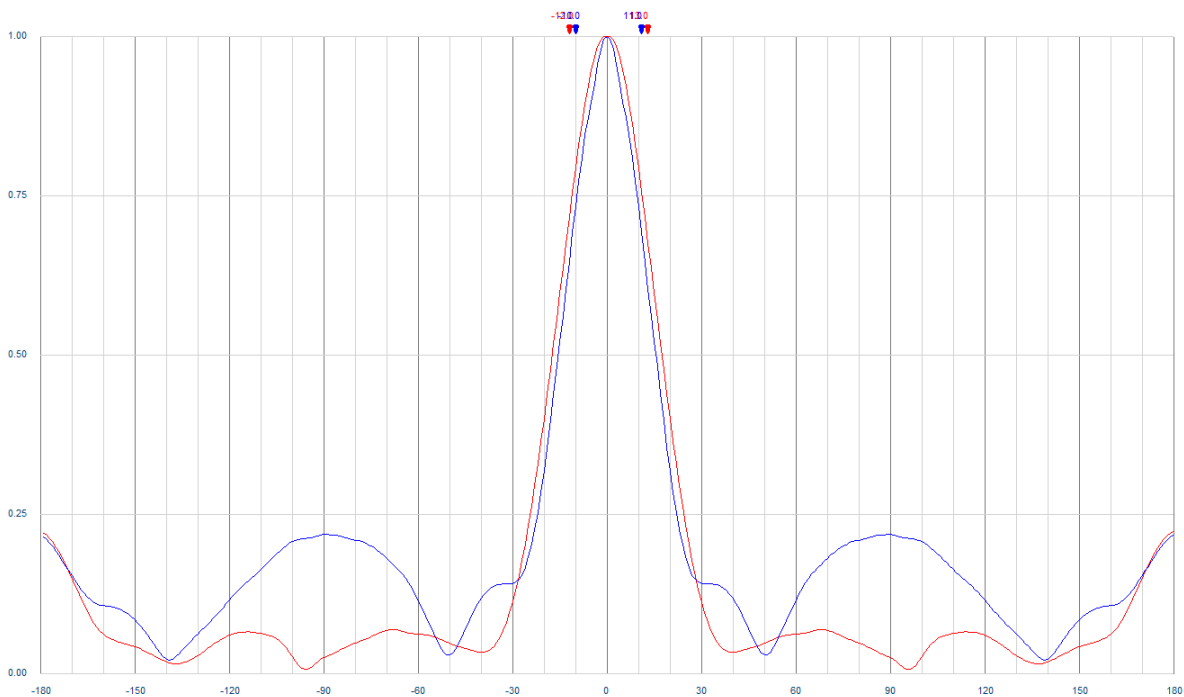


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Example polar radiation pattern

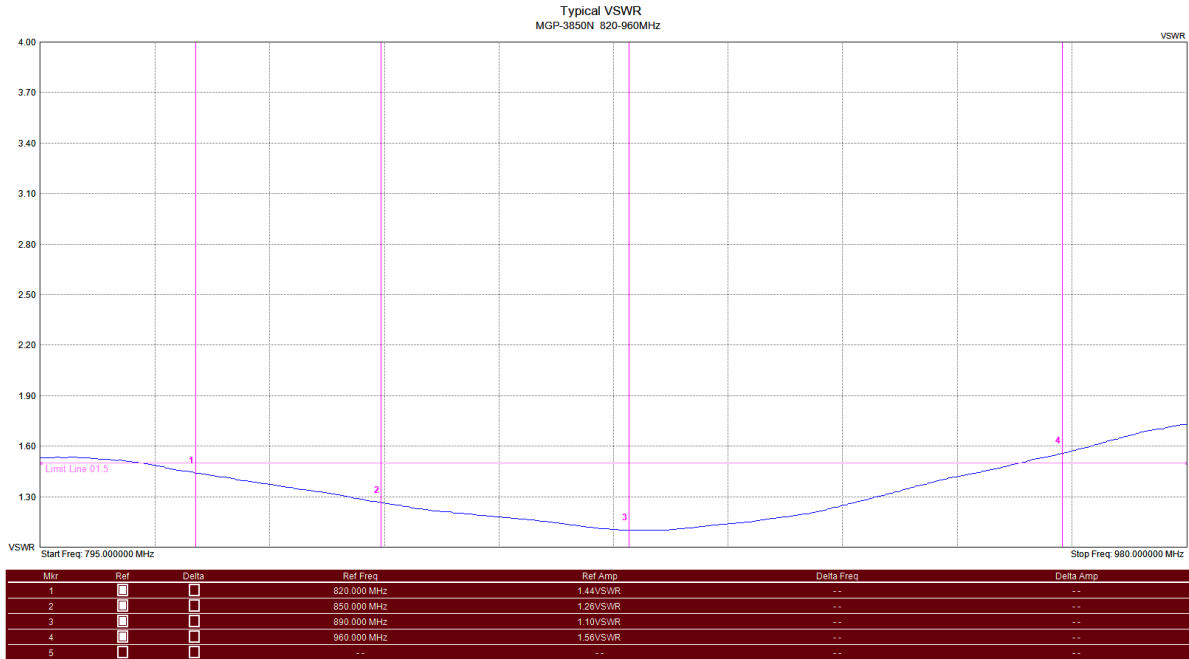


Example cartesian radiation pattern



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Typical VSWR

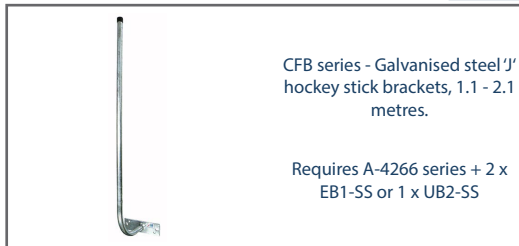


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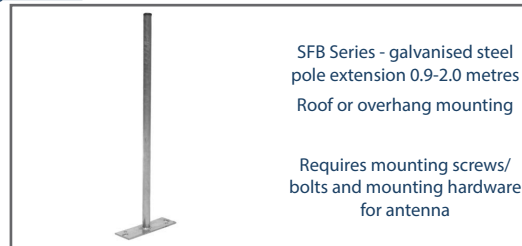


Suitable mounting hardware



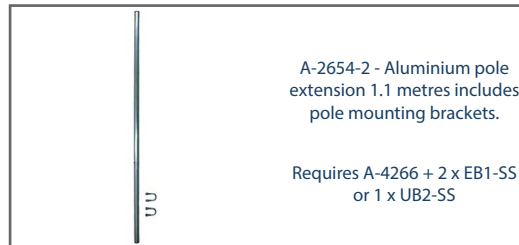
CFB series - Galvanised steel 'J' hockey stick brackets, 1.1 - 2.1 metres.

Requires A-4266 series + 2 x EB1-SS or 1 x UB2-SS



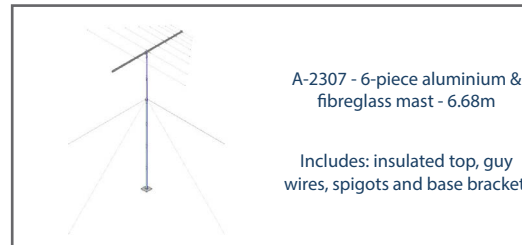
SFB Series - galvanised steel pole extension 0.9-2.0 metres
Roof or overhang mounting

Requires mounting screws/ bolts and mounting hardware for antenna



A-2654-2 - Aluminium pole extension 1.1 metres includes pole mounting brackets.

Requires A-4266 + 2 x EB1-SS or 1 x UB2-SS



A-2307 - 6-piece aluminium & fibreglass mast - 6.68m

Includes: insulated top, guy wires, spigots and base bracket.

Suitable feeder coaxial cable and connector



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/N 8226

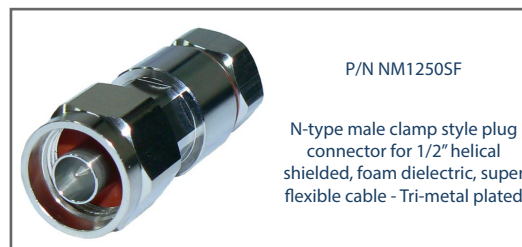
N-type male crimp plug connector for RU400 - Tri-metal plated



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/N NM1250SF

N-type male clamp style plug connector for 1/2" helical shielded, foam dielectric, super flexible cable - Tri-metal plated



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/N NM1250

N-type male clamp style plug connector for 1/2" corrugated shielded, foam dielectric cable - Tri-metal plated



7/8" corrugated shielding, foam dielectric coaxial cable

P/N ZCG7850

Available in per metre, 500m roll or alternatively request a custom cable assembly



P/N NM7850

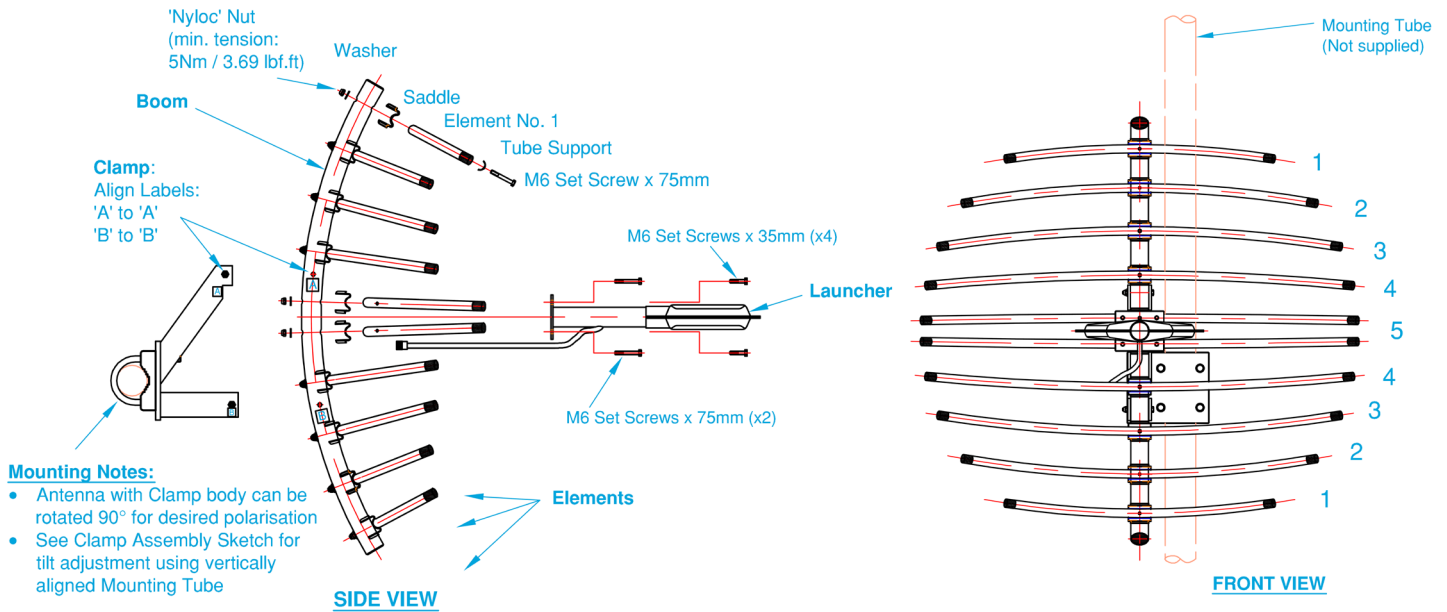
N-type male clamp style plug connector for 7/8" corrugated shielded, foam dielectric cable - Tri-metal plated



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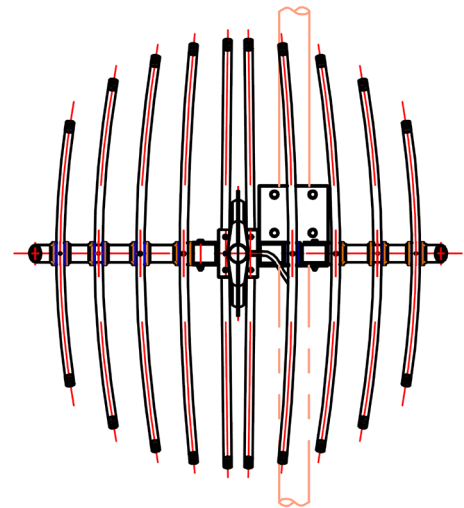
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Assembly:

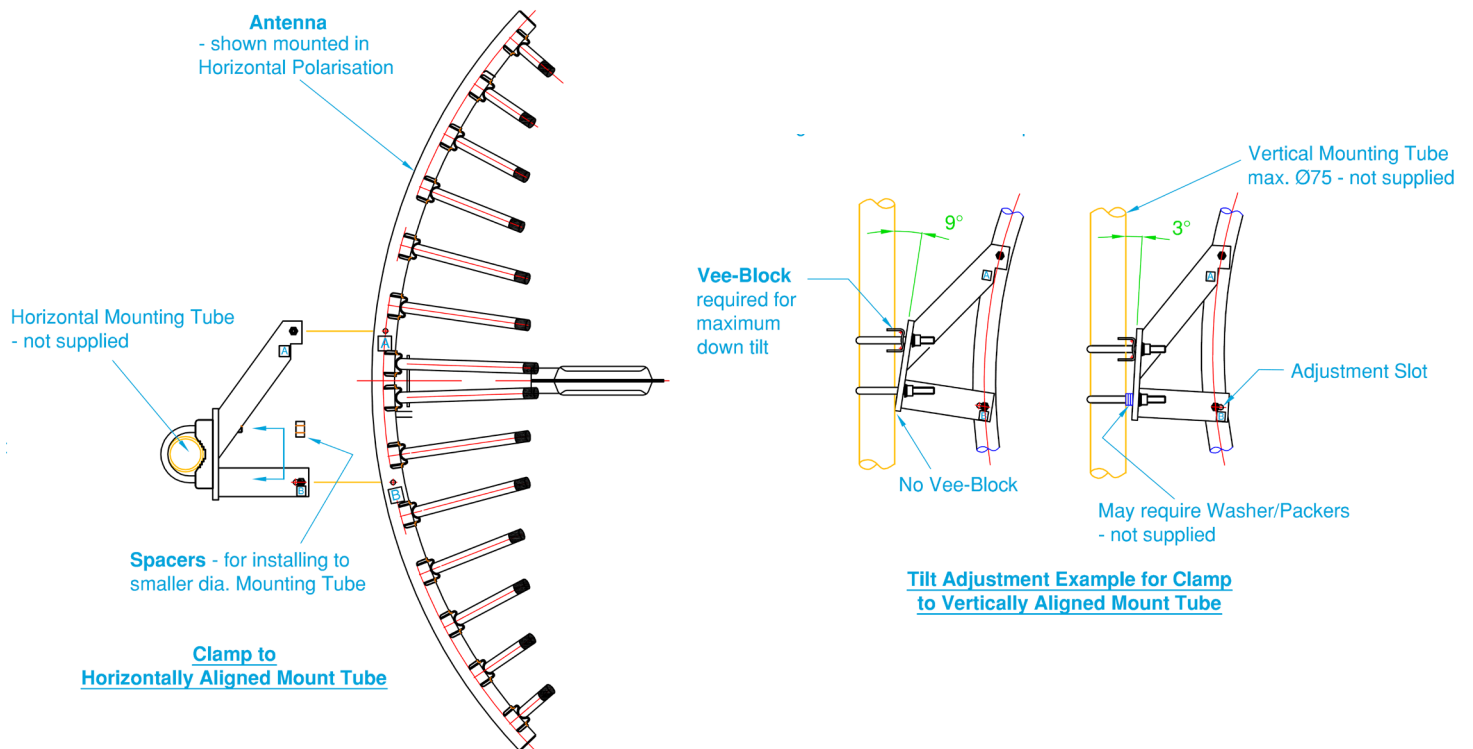
1. Install Elements Nos.1 to 4 (x2) onto Boom - use supplied M6 x 75mm Set Screws through Tube Support, Element, Saddle then Boom. Fasten with Washer & Nyloc Nut.
 2. Install Launcher and Elements No. 5 (x2) - use M6 x 75mm Set Screws (x2) through centre holes of Launcher backplate, Elements No. 7, Saddles then Boom. Use M6 x 35mm (x4) through Launcher backplate then Elements No. 7. Fasten with Washer & Nyloc Nut.
 3. Install Clamp - Clamp Label 'A' must match with Label 'A' on Boom (ditto Label 'B') - use M8 x 65mm Set Screw. Fasten with Washer & Nyloc Nut. Use supplied U-bolt Spacers when fitting Antenna to small diameter mounting Tube (customer supplied).
- **NOTE:** Nut tension: minimum 5 Nm (3.69 lbf.ft)





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Mounting Notes:

- see [Antenna Assembly Sketch](#) for fitting of Clamp to Grid Pack Dish

- Antenna with Clamp body can be rotated 90° for desired polarisation
- U-bolts & V-blocks can be rotated 90° for mounting to horizontally or vertically aligned Mounting Tube
- For tilt adjustment with vertically aligned Mounting Tube; remove lower or higher Vee-Block & loosen 'Clamp to Antenna' Bolts to achieve desired tilt.
- Tighten Bolts to secure into position.