

## MGP-4650N & MGP-4750N

### Highly directional UHF mini grid-pack point-to-point STL link UHF 570-670 MHz or UHF 710-790 MHz

The MGP series of UHF mini grid-packs provide an exceptionally broad bandwidth with a highly directional narrow radiation pattern with minimal side lobes.

This makes a grid-pack the best choice for use as a point-to-point STL broadcast studio to transmitter link.

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

	MGP-4650N	MGP-4750N
Construction	Corrosion resistant aluminium rear screen and launcher	
Frequency range	570-670 MHz - UHF	710-790 MHz - UHF
Bandwidth	Full selected frequency range stated	
VSWR	<1.5:1	
Tuning	Factory	
Gain - mid band	14.8 dBi	16.6 dBi
H Plane	22°	19°
E Plane	23°	22°
Front-to-back ratio	18 dB	20 dB
Maximum power	100 Watts	
Impedance	50 Ohms	
DC grounding	Yes	
Polarisation	Mount horizontal or vertical as required	
Cable	400mm RU400 low loss - bottom exit of launcher	
Connector	N-type female jack fitted to cable tail	
Dish dimensions	1.2 metres x 1.3 metres - assembled	
Weight	12.5kg	
Projected area	0.245m <sup>2</sup>	
Wind load at 160kph	29.673kg, 0.291kN	
Mounting hardware	2 x U-bolts, 50-75mm capability - supplied	
Installation tools required	10mm, 13mm and 19mm spanners for dish & bracket assembly	
Warranty	2 Years	

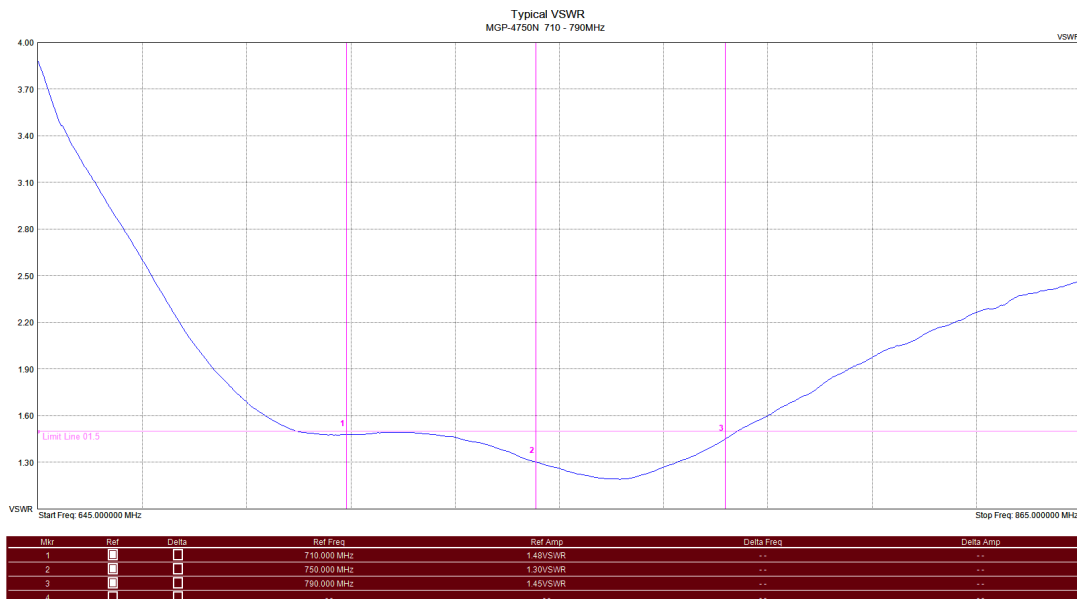
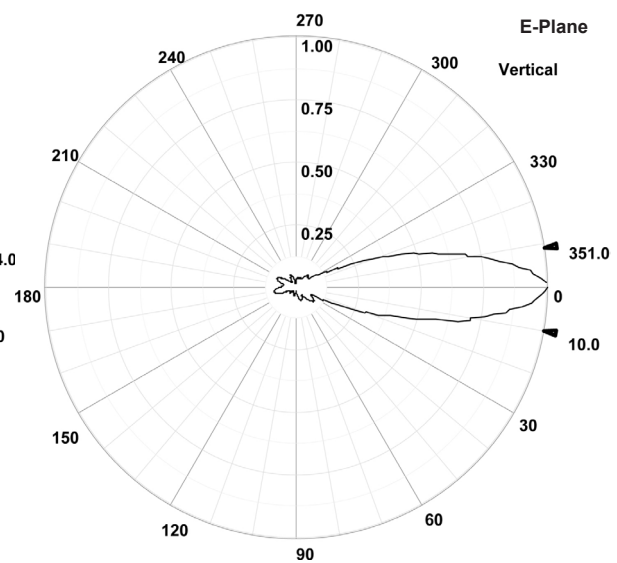
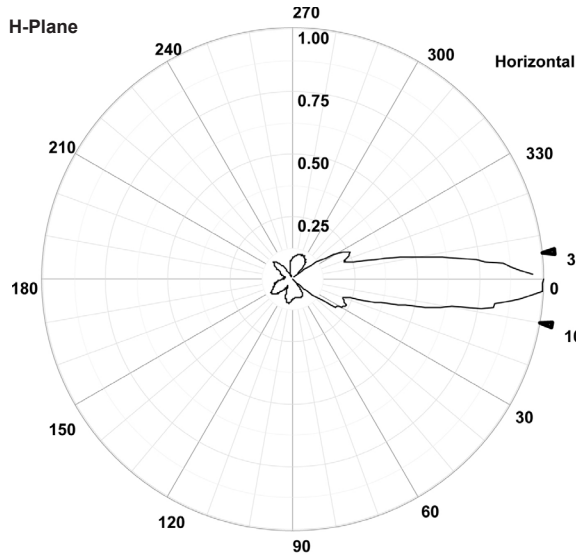


MGP-4850N Mount bracket with slotted mechanical tilt adjustment.



## MGP-4650N & MGP-4750N

Highly directional UHF mini grid-pack point-to-point STL link  
UHF 570-670 MHz or UHF 710-790 MHz



Typical VSWR - MGP-4750N



## MGP-4650N & MGP-4750N

Highly directional UHF mini grid-pack point-to-point STL link  
UHF 570-670 MHz or UHF 710-790 MHz




### 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 rolls 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



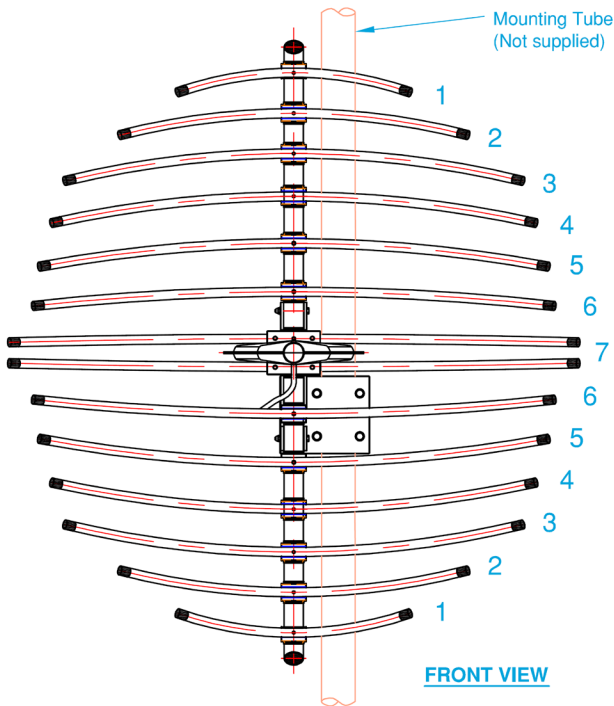
P/N NM7850

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



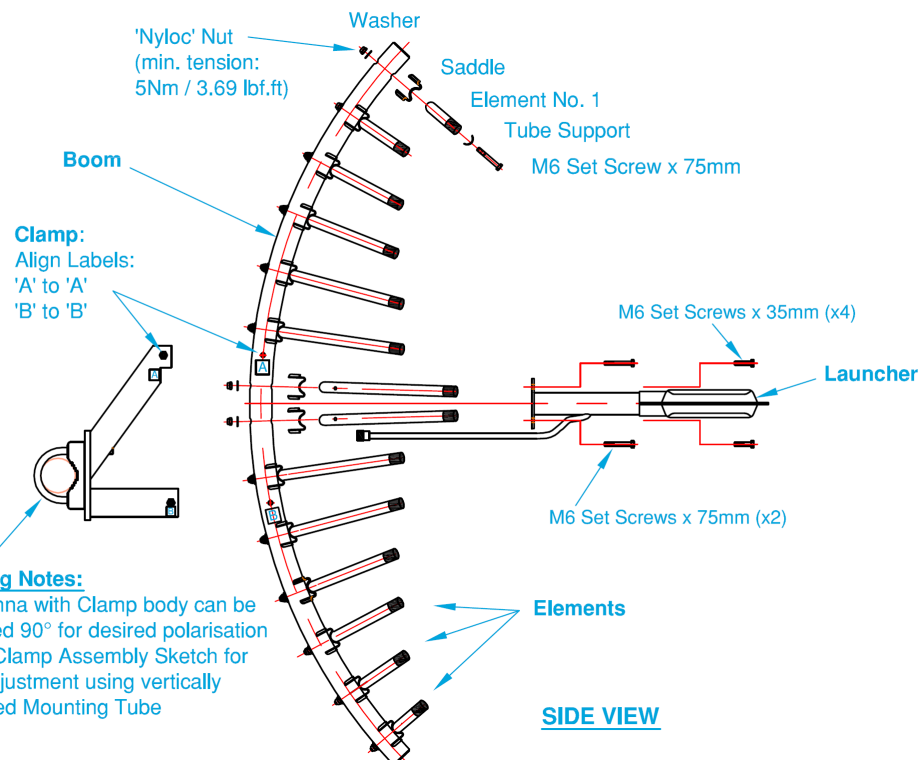
## MGP-4650N & MGP-4750N

Highly directional UHF mini grid-pack point-to-point STL link  
UHF 570-670 MHz or UHF 710-790 MHz



### Assembly:

1. Install Elements Nos.1 to 6 (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. 7 (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)



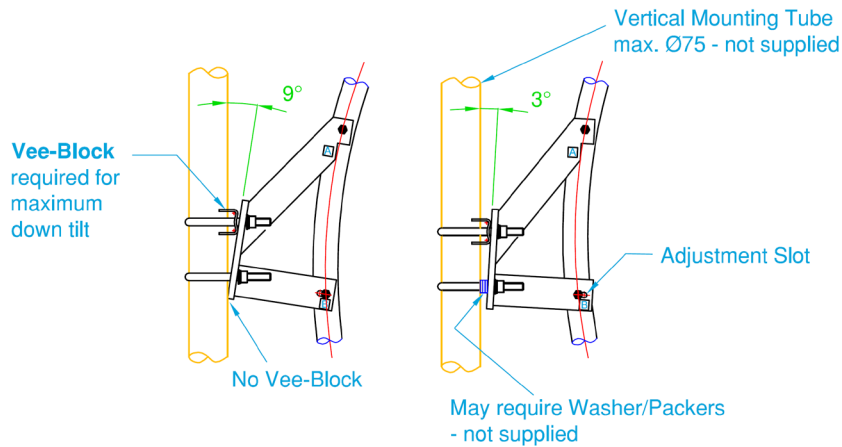
### Mounting Notes:

- Antenna with Clamp body can be rotated 90° for desired polarisation
- See Clamp Assembly Sketch for tilt adjustment using vertically aligned Mounting Tube



## MGP-4650N & MGP-4750N

Highly directional UHF mini grid-pack point-to-point STL link  
UHF 570-670 MHz or UHF 710-790 MHz



### Tilt Adjustment Example for Clamp to Vertically Aligned Mount Tube

#### 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.

