

Section 2

BROADCAST ANTENNAS

Updated 14 March 2012

MGP Series Mini Grid Pack Point-to-Point STL Link Antennas

Frequency
570 – 960 MHz

Bandwidth
See Table



The MGP series of UHF mini grid pack antennas provide an exceptionally broad bandwidth at better than 1.5:1 VSWR with high gain at middle of the band. Other key features of these mini grid packs are :

- The highly directional narrow radiation pattern with minimal side lobes makes a grid pack the best choice for use as a point-to-point STL broadcast studio to transmitter link.
- High front-to-back ratio, far superior to a conventional Yagi.
- Can be mounted either Horizontal or Vertical as your application requires.
- The high quality, rugged and durable aluminium construction ensures long term reliability and service.
- Easy to transport and install.
- Occupies minimal tower space.
- Designed and manufactured in Australia.

The MGP series of mini grid packs consists of 3 models each factory tuned to cover a designated bandwidth within the UHF frequency range 570 to 960 MHz.

An N-female connector rated for up to 100 watts input power is fitted to the 400 mm RU400 low loss cable tail.

The antennas are supplied in kit form and require assembly. This allows for shipping at a low cost with the added advantage of reducing the likelihood of damage in transit.

The kit includes U-bolts for mounting the mini grid pack to a round mast between 50 mm and 75 mm in diameter.



SPECIFICATIONS	MGP-4650N	MGP-4750N	MGP-4850N
Frequency Range	570 – 670 MHz	700 – 820 MHz	820 – 960 MHz
Bandwidth	Full Band	Full Band	Full Band
Return Loss, VSWR	Better than -15 dB, less than 1.5:1 full band		
Tuning	Factory	Factory	Factory
Mid-Band Gain	14.8 dBi	16.6 dBi	18.5 dBi
E-Plane	23°	22°	20°
H-Plane	22°	19°	16°
Front-to-Back Ratio	18 dB	20 dB	22 dB
Max Input Power	100 Watts		
Impedance	50 Ohms		
DC Grounding	Yes		
Polarisation	Mount Horizontal or Vertical as required		
Cable Tail	400 mm of RU400 low loss		
Connector	N-female fitted		
Height	1.3 metres assembled		
Width	1.2 metres assembled		
Weight	12.5 kg		
Projected Area	0.245 m ²		
Wind Load 160 kph	29.673 kg, 0.291 kN		
Construction	Aluminium with UV resistant black caps, stainless steel bolts and nuts		
Mounting	U-Bolts are supplied to suit a round mast between 50 mm and 75 mm in diameter		
WARRANTY	2 Years		

MGP-4850N sample patterns at 850 MHz

