VHF Adjustable Ground Plane Antennas

70-175 MHz

GP Series



The GP Series is a range of omnidirectional unity gain adjustable ground plane antennas ideal for local area coverage when a high gain antenna is not required or justified. The broad vertical beamwidth offers excellent null fill for consistent signal coverage. GP Series antennas are easily tuned in the field by adjusting the position of the ground plane elements.

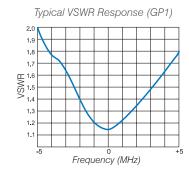
Electrically, the GP Series antenna is a quarter wave radiating element with the radials acting as a counterpoise. These radials are of one-piece construction and utilise a unique single bolt clamping design. The antennas are DC grounded for superior lightning protection and the reduction of precipitation static noise.



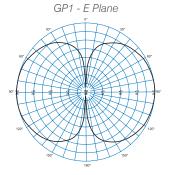
Features:

- Easily field tuned by adjusting the position of the radials
- Lightweight and easy to mount
- Broad vertical beamwidth for excellent null fill
- Compact Shipped disassembled for ease of handling

Electrical



| Model Number | GP1 | GP3 | GP2 | | |
|-----------------------------------|----------------|-----------|-----------|--|--|
| Nominal Gain dBi (dBd) | 2 (Unity) | | | | |
| Frequency MHz | 70 - 85 | 118 - 136 | 148 - 175 | | |
| Tuned Bandwidth MHz | 5 | 10 | 15 | | |
| VSWR (Return Loss) | <1.5 :1 (14dB) | | | | |
| Nominal Impedance Ω | 50 | | | | |
| Vertical Beamwidth ^o | 110 | 75 | | | |
| Horizontal Beamwidth ^o | Omni +/-0.5dB | | | | |
| Input Power W | 200 | | | | |



Mechanical

| Model Number | | GP1 | GP3 | GP2 | |
|--------------------------------|----------|--|------|------|--|
| Construction | | Heavy duty aluminium radiating element encased in a PVC radome | | | |
| Length m | | 1.8 | 1.5 | 1.3 | |
| Weight kg | | 3.0 | 3.0 | 2.0 | |
| Termination | | N female with 0.5m RG213 cable tail | | | |
| Mounting Area | | 500mm x 40mm diam. aluminium | | | |
| Suggested Clamps | | 2 x UB1 or 2 x UC1 | | | |
| Projected Area cm² | No ice | 1752 | 1246 | 988 | |
| | With ice | 3349 | 2160 | 1730 | |
| Wind Load (Thrust) @ 160km/h N | | 208 | 148 | 117 | |
| Torque @160 km/h Nm | | 67 | 33 | 11 | |