



ANTENNA EXPERTS

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Model # AP-180034

1700 – 2000 MHz.

34 dBi. Gain

UHF Grid Parabolic Antenna

DESIGN FEATURES: The AP-180034 grid parabolic antenna consists of full Parabolic reflector having a diameter of 4 Meters for use in all tactical and fixed station applications for terrestrial point to point analogue and digital communication radio link. The antenna covers 150 MHz bandwidth, operates in linear polarization and requires two operators for installation. The antenna dipole feed uses an Air-Cored transmission line. The mounting arrangement of Grid Parabolic Antenna permits to change the polarization from horizontal to vertical and vice-versa by mounting hardware fitted at rear end of the antenna. The antenna is supplied with +/-5 degrees elevation tracking mechanism. The grid parabolic antenna operates at D.C. ground with low resistance discharge path for protection against lightning and immunity to noise. The grid parabolic antenna is highly suitable for long range STL link.

CONSTRUCTIONS: The AP-180034 uses 6063T6 ultra corrosion resistant architectural anodized aluminium alloy and supplied with epoxy based anti-corrosive powder coating finish in order to prevent it further from severe environmental condition. The parabolic reflector is illuminated by a primary feed which is fitted to the center of assembly with quick fastener system. Radiating elements and the dipole feed are made of high quality brass. All the screws, nuts and bolts of tactical microwave antenna are of marine grade stainless steel. The antenna supplied with army olive green color. The tactical grid parabolic antenna can be installed at vertical erected mast.

TRACKING MECHANISM: The AP-180034 grid parabolic antenna supplied with elevation tracking mechanism where fine adjustments is necessary to optimize the signal strength of radio link along with two side struts to provides extra support and rigidity to the antenna

ELECTRICAL SPECIFICATIONS:

Frequency Range	1700 -2000 MHz
Gain @ Mid Band	34 dBi.
Bandwidth	150 MHz.
Polarization	V or H
Input Impedance	50 Ohms.
Radiation Pattern	Directional
-3 dB. Beam-width @ Mid Band	3 Degrees.
Front to Back Ratio	42 dB.
Cross Polarized Discrimination	38 dB.
VSWR – Better than	1.5:1
RF Power Handling Capacity	250 Watts.
Input Termination	N-Female
Lightning Protection	Direct Ground



MECHANICAL SPECIFICATIONS:

Support Pipe & Grid Members Materials	6063T6 Aluminum Alloy
Mounting Hardware	Marine Grade Stainless Steel
Gross Weight	200 Kgs.
Wind Rating	190 Km/Hr.
Elevation Tracking	+/- 5 Degrees
Number of Side Strut	2 Numbers
Support Pipe Material - Dia	6063T6 Aluminum Tube – 51mm (2")
Diameter of Parabolic Reflector	4 Meters (13.2 feet)
Grid Members Materials	6063T6 Aluminum Tube 5/8" (16mm)
Radiating Elements Materials	High Quality Brass
Maximum Mount Pipe Diameter - Dia	115 mm (4.5 Inches)
Antenna Final Finish	Olive Green Military Colour

ENVIRONMENTAL SPECIFICATIONS:

Operating Temperature	(-)30 to +70 Degrees Celsius
Storage Temperature	(-)40 to +80 Degrees Celsius
Humidity	0 to 95% RH

Note: All information contained in the datasheet is subject to change without any prior notice.