



ANTENNA EXPERTS

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Model # AP-85028 700 – 1000 MHz. 28 dBi. Gain

UHF Grid Parabolic Antenna

DESIGN FEATURES: The AP-85028 grid parabolic antenna consists of full Parabolic reflector having a diameter of 4 Meters for use in point-to-point terrestrial analogue and digital communication systems. 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 dipole feed uses an Air-Cored transmission line. The grid parabolic antenna operates at D.C. ground with low resistance discharge path for protection against lightning and immunity to noise.

CONSTRUCTIONS: The AP-85028 grid parabolic antenna uses 6063T6 ultra corrosion resistant architectural anodized aluminum alloy. The parabolic reflector is illuminated by a primary feed horn 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 stainless steel. The antenna supplied with army green color. The complete antenna is supplied with anti-corrosive powder coating finish and the dipole feed is completely sealed inside ABS housing/radome. The AP-85028 grid parabolic antenna supplied with elevation tracking mechanism where fine adjustments is necessary to optimize the signal strength of radio link along with 2 side struts to provide extra rigidity to an antenna.

FCC COMPLIANCE: This grid parabolic antenna is 100% in compliance with FCC part 101.115 covering directional antenna especially the front to back ratio, beam-width and cross polarization discrimination.

ELECTRICAL SPECIFICATIONS:

Frequency Range	700 - 1000 MHz.
Gain @ Mid Band	28 dBi.
Bandwidth	80 MHz.
Polarization - Linear	Vertical or Horizontal
Input Impedance	50 Ohms.
Radiation Pattern	Directional
Beam-width –Half Power Points @ Mid Band	6 Degrees.
Front to Back Ratio – Better Than	42 dB.
Cross Polarized Discrimination – Better Than	36 dB.
VSWR – Better than	1.5:1
RF Power Handling Capacity	250 Watts.
Input Termination	N-Female
Lightning Protection	Direct Ground

MECHANICAL SPECIFICATIONS:

Reflector Materials	6063T6 Aluminum Alloy
Mounting Hardware	Marine Grade Stainless Steel
Gross Weight Approximate	200 Kgs.
Wind Rating	190 Km/Hr.
Elevation Tracking	+/- 5 Degrees
Support Pipe & Rim -Outer Diameter	Aluminum Tube 63 mm (2.5")
Grid Member Materials-Outer Diameter	Aluminum Tube 12 mm (1/2")
Diameter of Parabolic Reflector	4 Meters (13.4 Feet)
Radiating Materials	High Quality Brass
Materials Finish/Color	Olive Green Military Color
Maximum Mount Pipe Diameter	110 mm (4.3 Inches)

ENVIRONMENTAL SPECIFICATIONS:

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

