



# ANTENNA EXPERTS

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Model # APT-4729      4400 – 5000MHz.      0.9 Meter      29 dBi. Gain

## Tactical Radio Relay Microwave Grid Parabolic Antenna NATO Band IV

**DESIGN FEATURES:** The APT-4729 tactical microwave grid parabolic antenna consists of full Parabolic reflector having a diameter of 0.9 Meters for use in all tactical and fixed station applications for conventional radio relay systems. The antenna covers full band IV, operates in linear polarization and requires only one operator for installation. The antenna features a rare combination of high gain low side lobes and a rugged construction. APT-4729 is perfect for use in crowded electromagnetic spectrums which avoid interference from co-sited antenna. The mounting arrangement of Tactical Radio Relay 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 +/-15 degrees elevation tracking mechanism.

**CONSTRUCTIONS:** The APT-4729 uses 6063T6 ultra corrosion resistant architectural anodized aluminium alloy and supplied with powder coating finish in order to prevent it further from severe environmental condition. The tactical microwave antenna operates in the 4400-5000MHz. frequency band and can be installed at vertical erected mast. The parabolic reflector is illuminated by a primary feed which is fitted to the center of assembly with quick fastener system. The grid parabolic antenna operates at D.C. ground with low resistance discharge path for protection against lightning and immunity to noise. All the screws, nuts and bolts of tactical microwave antenna are of marine grade stainless steel. The antenna supplied with olive green epoxy based anti-corrosive paints.

### ELECTRICAL SPECIFICATIONS:

Frequency Range	4400-5000 MHz.
Isotropic Gain @ Mid Band	29 dBi.
Bandwidth	Entire Band IV
Polarization	V or H
Input Impedance	50 Ohms.
Radiation Pattern	Directional
-3 dB Beam-width @ Mid Band	5 Degrees
Front to Back Ratio	30 dB. Typical
Cross Polarization Discrimination	25 dB. Typical
VSWR – Better than	2:1
RF Power Handling Capacity	150 Watts.
Input Termination	N-Female
Lightning Protection	Direct Ground



### MECHANICAL SPECIFICATIONS:

Materials	6063T6 Aluminum Alloy
Mounting Hardware	Marine Grade Stainless Steel
Gross Weight	8 Kgs.
Wind Rating	180 Km/Hr.
Color/Finish	Powder Coated Army Green
Elevation Tracking	+/-15 Degrees
Radiating Element Materials	High Quality Brass
Support Pipe Materials	Aluminum Pipe 1" (25.4mm)
Diameter of Parabolic Reflector	0.95 Meters (3 feet)
Grid Members Materials	Aluminum Pipe ½" (12.7mm)
Maximum Mount Pipe Diameter	52 mm ( 2 Inches)

### 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.