

## ANTENNA EXPERTS

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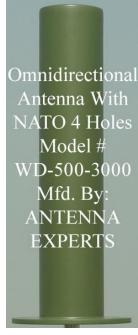
Model # WD-500-3000 500 – 3000 MHz. 2.15dBi Gain

## Wide Band Omni-directional Heavy Duty Discone Antenna

**DESIGN FEATURES:** WD-500-3000 wide band heavy duty fully welded discone antenna is specially designed to survive the most extreme conditions, where conventional antennas often fail. Due

to its low VSWR through entire band 500-3000 MHz., this discone antenna can be used as a transmitting and receiving antenna with high efficiency, to meet the broadband requirement of a base station antenna such as spectrum monitoring or jamming application without need of multiple antennas. WD-500-3000 wideband discone antenna is extremely rugged, fully welded at all junctions, all weather model, does not require any field tuning or adjustments. The wide vertical beamwidth of discone antennas allows clear communication for ground, sea, and ground-to-air applications. The fully welded wide band discone antenna is highly suitable for Oceanic application especially in arctic region where vibration and ice loading are main concern.

**CONSTRUCTIONS:** The fully welded wide band discone antenna uses 6063T6 Mil grade ultra corrosion resistant architectural anodized aluminum alloy with powder coating finish to protect the antenna further from severe environmental condition. All internal junctions are enclosed within a ruggedized radome to ensure survivability in the worst environments. The powder coating on all metal surfaces ensures complete protection from corrosive gases, ultraviolet radiation, salt spray, acid rain and sand storms in desert environments. Discone



Antenna termination enclosed inside the mounting pipe for complete weather protection. All the screws, nuts and bolts of wide band discone antenna are made of type 316 marine grade stainless steel. The antenna is also compatible with MIL STD 810G/F environmental standards.

## **ELECTRICAL SPECIFICATIONS:**

| ELECTRICAL SPECIFICATIONS:              |                              |
|---|------------------------------|
| Frequency Range                         | 500-3000 MHz.                |
| Gain                                    | Unity (2.15 dBi.)            |
| Bandwidth                               | Entire Band                  |
| Polarization                            | Vertical                     |
| Input Impedance                         | 50 Ohms.                     |
| Radiation Pattern                       | Omni-Directional             |
| Vertical Beam-width –Half Power Points. | 78 Degrees                   |
| VSWR – Better Than                      | 2.5:1                        |
| RF Power Handling Capacity              | 500 Watts                    |
| Input Termination                       | N-Female                     |
| MECHANICAL SPECIFICATIONS:              |                              |
| Materials                               | 6063T6 Aluminum Alloy        |
| Mounting Hardware -Materials            | Marine Grade Stainless Steel |
| Weight Approx                           | 2.5 Kgs.                     |
| Wind Rating                             | 200 Km/Hr.                   |
| Overall Length                          | 400 mm                       |
| Shipping Length                         | 500 mm                       |
| Support Pipe Materials                  | Powder Coated Aluminum       |
| Elements Materials                      | 6063T6 Aluminum Alloy        |
| Maximum Mount Pipe Diameter             | NATO 4 Holes or Customized   |
| ENVIRONMENTAL SPECIFICATIONS:           |                              |
| Operating Temperature                   | (-)30 to +70 Degrees Celsius |
| Storage Temperature                     | (-)40 to +80 Degrees Celsius |
| Humidity                                | 0 to 95 % RH                 |
|   |                              |