



ANTENNA EXPERTS

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Model # AWD-100-500

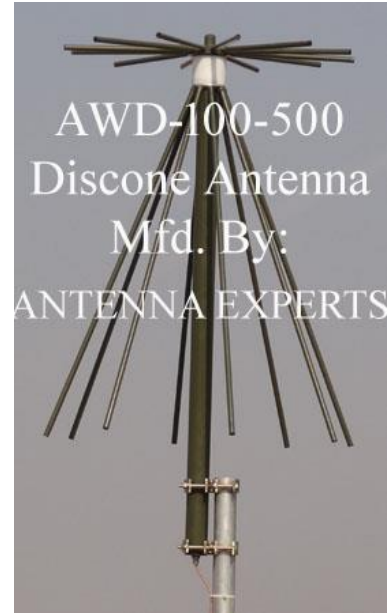
100 – 500 MHz.

2.14dBi Gain

VHF/UHF Wide Band Omni-directional Discone Antenna

DESIGN FEATURES: AWD-100-500 wide band heavy duty fully welded discone antenna is specially designed to survive the most extreme conditions, where conventional antennas often fail. AWD-100-500 wide band discone antenna is specially designed for omni-directional coverage. Due to its low VSWR through entire band from 100-500 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 at ATC sites for ground to ground and ground to air communication application without having the requirement of multiple antennas. The wide band discone antenna when packed, comes with cone and disc elements removed from the antenna body for ease of packing and shipment. The wide vertical beam-width of high power discone antennas allows clear communication for ground, sea, and ground-to-air applications. The powder coating on all metallic surfaces ensures complete protection from the corrosive gases, ultraviolet radiation, salt spray, acid rain present in coastal areas and sand storm environmental in dessert area.

CONSTRUCTIONS: AWD-100-500 wideband discone antenna is rugged all weather model, does not require any field tuning or adjustments. The compact size of discone antenna allows easy handling and specially designed mounting hardware results in fast installation. The cone and disc hubs of wide band discone antennas are made of 6063T6 ultra corrosion resistant architectural anodized aluminum alloy. Discone Antenna termination and feed cable lie enclosed inside the mounting pipe for complete weather protection. The antenna is supplied with Military Olive Green color powder coating finish to protect it further from sever environmental conditions. All the screws, nuts and bolts of heavy duty wide band discone antenna are made of type 316 marine grade stainless steel. The entire wide band ATC discone antenna can be assembled in the field within 5 minutes with out any special tools.



ELECTRICAL SPECIFICATIONS:

Frequency Range	100 - 500 MHz.
Gain - Typical	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:

Discone Antenna Materials	6063T6 Aluminum Alloy
Mounting Hardware -Materials	Marine Grade Stainless Steel
Gross Weight (with mounting bracket)	5.5 Kgs.
Wind Rating	200 Km/Hr.
Overall Length	0.9 Meter (35.5 Inches)
Shipping Length	1.2 Meter (48 Inches)
Support Pipe Material	Powder Coated Aluminum
Support Pipe - Diameter	51+/-0.5 mm with 2 mm Wall
Cone & Disk Elements Materials	Powder Coated Aluminum
Cone & Disk Elements - Diameter	12.7+/-0.5 mm with 3mm wall
Insulator Materials	Teflon & Delrin
Maximum Mount Pipe Diameter	32 mm to 52 mm (1.25 to 2")
Corrosive Treatment	Powder Coated Mil Green
Color / Finish	Olive Green

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.