

	VHF UHF Wide Band Discone Antenna		
	AWD-20-500	20-500 MHz	2 dBi Gain

Broadband Discone Architecture: The AWD-20-500 is a high-efficiency, ultra-wideband passive discone antenna engineered for continuous omnidirectional transmission and reception across the 20–500 MHz VHF/UHF radio spectrum. This military-grade base station antenna maintains an exceptionally low VSWR profile across its entire operational bandwidth, making it ideal for tactical spectrum monitoring, signal intelligence (SIGINT), electronic warfare, and RF jamming applications. Featuring a factory-tuned design that eliminates the need for field adjustments, it delivers a stable 2 dBi omnidirectional radiation pattern. Optimized for rapid tactical deployment, the antenna’s modular architecture includes removable cone and disc elements to streamline transport and logistics, while its integrated design completely encloses the N-Type RF termination and coaxial feed line within the mounting mast for absolute weatherproofing.

Military-Grade Structural Survivability: Compliant with rigorous MIL-STD-810G standards, the AWD-20-500 is constructed from premium 6063-T6 architectural aluminum alloy and heavy-duty hubs to ensure maximum structural integrity and aerodynamic wind-load resilience. To guarantee long-term mechanical reliability and prevent galvanic corrosion, all primary fasteners and mounting hardware are fabricated from premium Type 304 marine-grade stainless steel. The entire metallic assembly is finished with a specialized, epoxy-based powder coating in military olive green, offering high-durability protection against UV degradation, corrosive gases, coastal salt spray, acid rain, and abrasive desert sandstorms. This compact, maintenance-free discone antenna is engineered to deliver reliable, long-term survivability for fixed-station infrastructure and mobile deployable defense communication networks.



Electrical Specifications:

Frequency Range	20 - 500 MHz.
Gain - Typical	2 dBi
Bandwidth	Entire Band
Polarization	Vertical
Input Impedance	50 Ohms.
Radiation Pattern	Omni-Directional
Vertical Beam-width –Half Power Points.	76 Degrees Typical
VSWR – Better Than	3:1
RF Power Handling Capacity	500 Watts (Higher Optional)
Input Termination	N-Female

Mechanical Specifications:

Materials	6063T6 Aluminum Alloy
Mounting Hardware -Materials	High Grade Stainless Steel
Weight Approx	35 Kgs.
Wind Rating	150 Km/Hr.
Overall Length	4 Meters
No. of Disk/Cone Elements	12/9 Nos.
Shipping Length	2.7 Meters
Max. Mount Pipe Diameter	52mm (2 Inches)
Corrosion Protection	Epoxy-Based Powder Coating

Environmental Specifications:

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

Please contact us for further information like Azimuth & Elevation radiation patterns, Image and frequency Vs VSWR graph.