



VHF UHF Wide Band Discone Omni Antenna

AWD-30-512

30-512 MHz

2 dBi Gain

Ultra-Wideband Discone Performance: The AWD-30-512 is a heavy-duty, ultra-wideband omnidirectional discone antenna engineered for continuous transmission and reception across the 30–512 MHz VHF/UHF radio spectrum. Designed as a high-efficiency base station antenna, it maintains an exceptionally low VSWR profile across its entire operational bandwidth, making it an ideal choice for tactical electronic warfare, spectrum monitoring, signals intelligence (SIGINT), and RF jamming applications. This factory-tuned antenna requires zero field adjustments, delivering a stable 2 dBi omnidirectional radiation pattern. Optimized for rapid tactical deployment, its modular architecture features removable cone and disc elements that streamline transport, while the integrated design completely encloses the coaxial feed line and RF termination inside the heavy-duty mounting pipe for maximum weatherproofing.

Tactical Environmental Survivability: Engineered to withstand severe climatic anomalies, the AWD-30-512 is constructed from high-grade 6063-T6 architectural aluminum alloy, delivering superior structural integrity and corrosion resistance. The entire metallic assembly is finished with a specialized, epoxy-based powder coating in military olive green, offering a ruggedized defense against UV degradation, salt spray, acid rain, and high-abrasion desert environments. To ensure long-term mechanical reliability and prevent galvanic corrosion, all structural fasteners and mounting hardware are fabricated from premium, high-grade stainless steel. Its compact physical footprint reduces aerodynamic wind loading, guaranteeing maintenance-free longevity and survivability for permanent fixed-station installations or rapid-deployable defense networks.



Electrical Specifications:

Frequency Range	30 - 512 MHz.
Gain - Typical	2 dBi over Entire Bnad
Bandwidth	Entire 30-512MHz Band
Polarization	Vertical
Input Impedance	50 Ohms.
Radiation Pattern	360 Degrees (Omni)
Vertical Beam-width –Half Power Points.	70+/-10 Degrees Typical
VSWR – Better Than	3 :1
RF Power Handling Capacity	500 Watts (1.5KW Optional)
Input Termination	N-Female or DIN-Female

Mechanical Specifications:

Antenna Materials	6063T6 Aluminum Alloy
Mounting Hardware -Materials	High Grade Stainless Steel
Weight Approx	22 Kgs.
Wind Rating	185 Km/Hr.
Overall Length	2.9 Meters
Maximum Mount Pipe Diameter	52 mm (2 Inches)
Corrosion Protection	Epoxy-Based Powder Coating
No. of Disk Elements	12 Nos.
No. of Cone Elements	9 Nos.

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.