



VHF UHF Shipboard Mount Discone Antenna

WD-100-500

100-500 MHz

2.15 dBi Gain

Optimized VHF/UHF Broadband RF Performance: The WD-100-500 is an ultra-wideband, **heavy-duty fully welded** shipboard discone antenna engineered for high-efficiency omni-directional RF communication, spectrum monitoring, and electronic warfare (jamming) applications. Operating seamlessly across the **critical 100–500 MHz VHF/UHF** frequency range with a 2.15 dBi gain, this passive discone antenna maintains an exceptionally low VSWR across the entire band, **completely eliminating the need for complex, multi-antenna arrays**. Its wide vertical beamwidth ensures robust, uninterrupted signal propagation for critical ground-to-ground, **maritime tactical networks, and ground-to-air (aerospace) communication links**. By providing uniform multi-band coverage in a single consolidated footprint, it serves as an ideal high-power broadband base station antenna for high-density naval and defense applications.

Ruggedized Marine-Grade Engineering & Arctic Survivability: Built to withstand the most **punishing naval deployment environments**, the WD-100-500 features a fully welded discone structure fabricated from Mil-grade 6063-T6 architectural anodized aluminum alloy. Specially **optimized for oceanic and arctic applications**, its ultra-rugged design **delivers extreme resilience against severe vibration and ice loading**. All

internal electrical junctions are sealed within a ruggedized protective radome, while the external metal surfaces feature an **advanced corrosion-resistant powder coating** that shields the system from UV radiation, salt spray, acid rain, and desert sandstorms. For maximum weatherproofing, the RF termination is entirely enclosed within the heavy-duty mounting pipe, and all structural hardware is constructed from **316 marine-grade stainless steel**, delivering a completely **maintenance-free, zero field-tuning** antenna solution.

MIL-STD-810 Fully Welded
Shipboard Mount Antenna
Model # WD-100-500
Mfd. By:
ANTENNA
EXPERTS



Electrical Specifications:

Frequency Range	100-500 MHz.
Gain - Typical	Unity (2.15 dBi.)
Bandwidth	Entire 100-500MHz 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 (1.5KW Optional)
Input Termination	N-Female

Mechanical Specifications:

Major Materials Used	6063T6 Aluminum Alloy
Mounting Hardware -Materials	High Grade Stainless Steel
Weight Approx	7.5 Kgs. with Brackets
Wind Rating	200 Km/Hr.
Overall Length	0.9 Meter (35.5 Inches)
Shipping Length	1.25 Meter (50 Inches)
Mounting Type	Mast or NATO 4 Holes Flange
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.