



VHF UHF Ground Station ATC Omni Antenna

AWD-118-400

118-400 MHz

2 dBi Gain

Wideband Discone Architecture: The AWD-118-400 is a heavy-duty, dual-band VHF/UHF discone antenna engineered for omnidirectional broadband coverage across the 118–400 MHz frequency spectrum. Optimized for high-efficiency transmission and reception, this military-grade base station antenna maintains an ultra-low VSWR profile across its entire operational bandwidth, making it ideal for ATC sites executing simultaneous ground-to-ground and ground-to-air RF communications without requiring multiple antenna arrays. Its wide vertical beamwidth ensures stable, high-power signal propagation for critical aerospace, terrestrial, and maritime networks. Designed for rapid tactical deployment, the antenna features a modular configuration with removable cone and disc elements, allowing for an incredibly fast, tool-less field installation in under five minutes while keeping the coaxial feed line and RF termination fully enclosed within the mounting mast for absolute environmental isolation.

Ultra-Ruggedized Structural Engineering: AWD-118-400 built to survive extreme climatic anomalies where conventional antennas fail, the structural framework of this ruggedized discone antenna utilizes 6063-T6 architectural anodized aluminum alloy for its core cone and disc hubs. To ensure long-term mechanical reliability and prevent galvanic corrosion, all primary fasteners, screws, and hardware are fabricated from premium Type 304 marine-grade stainless steel. The entire metallic assembly is finished with an advanced, epoxy-based powder coating in military olive green, offering impenetrable defense against UV radiation, corrosive industrial gases, coastal salt spray, acid rain, and high-abrasion desert sandstorms. This durable, factory-tuned design operates entirely maintenance-free, offering exceptional structural resilience and RF transparency in the world's most severe environments.



Electrical Specifications:

Frequency Range	118 - 400 MHz.
Gain - Typical	2 dBi.
Bandwidth	Entire Band
Polarization	Vertical
Input Impedance	50 Ohms.
Radiation Pattern	Omni-Directional
Vertical Beam-width –Half Power Points.	78 Degrees Typical
VSWR – Better Than	2:1
RF Power Handling Capacity	500 Watts
Input Termination	N-Female

Mechanical Specifications:

Discone Antenna Materials	6063T6 Aluminum Alloy
Mounting Hardware -Materials	High Grade Stainless Steel
Number of Disk Elements	12 Number
Number of Cone Elements	9 Number
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

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.