



ANTENNA EXPERTS

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Model # WDHP-800-2000 800 – 2000 MHz. 2.15 dBi Gain

Wide Band Omni-directional Heavy Duty Fully Welded Discone Antenna

DESIGN FEATURES: WDHP-800-2000 wide band high power heavy duty fully welded discone antenna is specially designed to survive the most extreme conditions, where conventional antennas often fail. Due to its low VSWR through entire band from 800-2000 MHz., this high power handling discone antenna can be used as a transmitting and receiving antenna with high efficiency, to meet the broadband requirement of a base station antenna such as spectrum monitoring or jamming application without need of multiple antennas. WDHP-800-2000 high power wideband discone antenna is extremely rugged, fully welded at all junctions, all weather model, does not require any field tuning or adjustments. The wide vertical beam-width of high power discone antennas allows clear communication for ground, sea, and ground-to-air applications. The fully welded wide band discone antenna is also highly suitable for Oceanic application especially in arctic region where vibration and ice loading are main concern.

CONSTRUCTIONS: The fully welded high power wide band discone antenna uses 6063T6 Mil grade ultra corrosion resistant architectural anodized aluminum alloy with powder coating finish to protect the antenna further from severe environmental condition. All internal junctions are enclosed within a ruggedized ABS radome to ensure survivability in the worst environments. The powder coating on all metal surfaces ensures complete protection from corrosive gases, ultraviolet radiation, salt spray, acid rain and sand storms in desert environments. The high power wide band discone antenna termination enclosed inside the mounting pipe for complete weather protection. All the screws, nuts and bolts of heavy duty wide band discone antenna are made of type 316 marine grade stainless steel.

RADOME: All elements of high power wide band discone antenna are fully welded to its appropriate location to prevent RF inter-modulation and antenna is completely protected within a high-tech ruggedized radome which is made of ABS material to ensure survivability in the worst environments conditions. The heavy duty ABS enclosure has excellent transparency for RF signals and enough strength to withstand more than specified wind loads. Cylindrical enclosure is used for low wind loading and for minimal effect of ice formation on the high power wide band antenna operation as well as providing an aesthetically pleasing appearance. The antenna is supplied with olive green MIL color finish. Other customized housing/radome color can also be supplied on request.



ELECTRICAL SPECIFICATIONS:

Frequency Range	800-2000 MHz.
Gain	2.15 dBi. Typical
Bandwidth	Entire Band
Polarization	Vertical
Input Impedance	50 Ohms.
Radiation Pattern	Omni-Directional
Vertical Beam-width –Half Power Points.	78 Degrees
VSWR – Better Than	2:1
RF Power Handling Capacity	500 Watts
Input Termination	N-Female

MECHANICAL SPECIFICATIONS:

Materials	6063T6 Aluminum Alloy
Mounting Hardware -Materials	Marine Grade Stainless Steel
Weight Approx	1.5 Kgs.
Wind Rating	200 Km/Hr.
Overall Length	200 mm (8 Inches)
Shipping Length	250 mm (10 Inches)
Support Pipe Materials	Powder Coated Aluminum
Elements Materials	6063T6 Aluminum Alloy
Insulator Materials	Teflon & Nylon
Maximum Mount Pipe Diameter	52 mm (2 Inches)
Enclosure/Radome Materials	High Quality ABS
Finishing	Olive Green MIL Color

ENVIRONMENTAL SPECIFICATIONS:

High Temperature	MIL-STD-810G, Method 500.5, Procedures I & II
Low Temperature	MIL-STD-810G, Method 502.5, Procedures I & II
Humidity	MIL-STD-810G, Method 507.5, Procedures I & II
Shock	MIL-STD-810G, Method 516.6, Procedure IV
Vibration	MIL-STD-810G, Method 514.6, Procedure I
Rain	MIL-STD-810G, Method 506.5, Procedure I
Fungus Resistance	MIL-STD-810G, Method 508.6
Salt Fog	MIL-STD-810G, Method 509.5

Note: All information contained in the datasheet is subject to change without any prior notice.