



# ANTENNA EXPERTS

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Model # CWD-20-6000 20 – 6000 MHz. 2 dBi Gain

## COMPACT WIDE BAND OMNI-DIRECTIONAL DISCONE SCANNER ANTENNA

**DESIGN FEATURES:** CWD-20-6000 compact wide band passive discone antenna uses 6063T6 ultra corrosion resistant architectural aluminum alloy and is specially designed for omni-directional coverage. Due to its low VSWR through entire band from 20-6000 MHz, this discone antenna can be used as a transmitting antenna between 66-6000MHz and monitoring, scanning antenna with high efficiency between 20-6000MHz band, to meet the broadband requirement of a base station antenna such as spectrum monitoring application. The wide vertical beam-width of compact wide band discone antennas allows clear communication for ground, sea, and ground-to-air applications. The wide band discone antenna when packed comes with cone and disc elements removed from the antenna body for ease of packing and shipment. CWD-20-6000 compact discone antenna uses passive loading technique at lower frequency edge to reduce the overall size of omni antenna while maintaining the excellent efficiency over 95% of the band.

**CONSTRUCTIONS:** CWD-20-6000 compact wideband passive discone antenna is rugged all weather model, does not require any field tuning or adjustments. The compact size of antenna allows easy handling and specially designed mounting hardware results in fast installation. The powder coating on all metal surfaces ensures complete protection from corrosive gases, ultraviolet radiation, salt spray, acid rain and sandstorms in desert environments. All fasteners and mounting brackets are made of type 316 marine grade stainless steel. Compact wide band discone antenna termination and feed cable lie enclosed inside the mounting pipe for complete weather protection.



### ELECTRICAL SPECIFICATIONS:

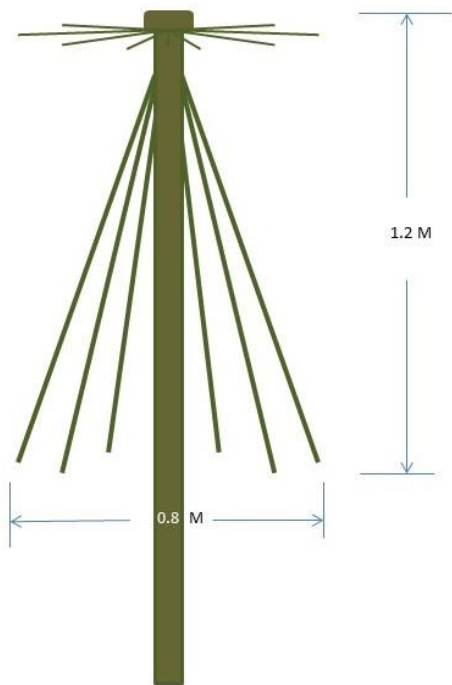
Frequency Range	20 - 6000 MHz.
Gain – Typical	2 dBi. (66-6000MHz)
Bandwidth	Entire Band
Polarization	Vertical
Input Impedance	50 Ohms
Radiation Pattern	Omni-Directional
Vertical Beam-width –Half Power Points.	78 Degrees
VSWR – Better Than	3:1 over 95% band
RF Power Handling Capacity	20-66MHz: Rx Only 80-6000MHz: Rx & Tx Both
Input Termination	N-Female

### MECHANICAL SPECIFICATIONS:

Materials	6063T6 Aluminum Alloy
Mounting Hardware -Materials	Marine Grade Stainless Steel
Gross Weight Approx	7 Kgs.
Wind Rating	180 Km/Hr.
Overall Length	1.2 Meters
Overall Width	0.8 Meters
Support Pipe Materials	Stainless Steel
Insulator Materials	Teflon & Nylon
Maximum Mount Pipe Diameter	52 mm (2 Inches)

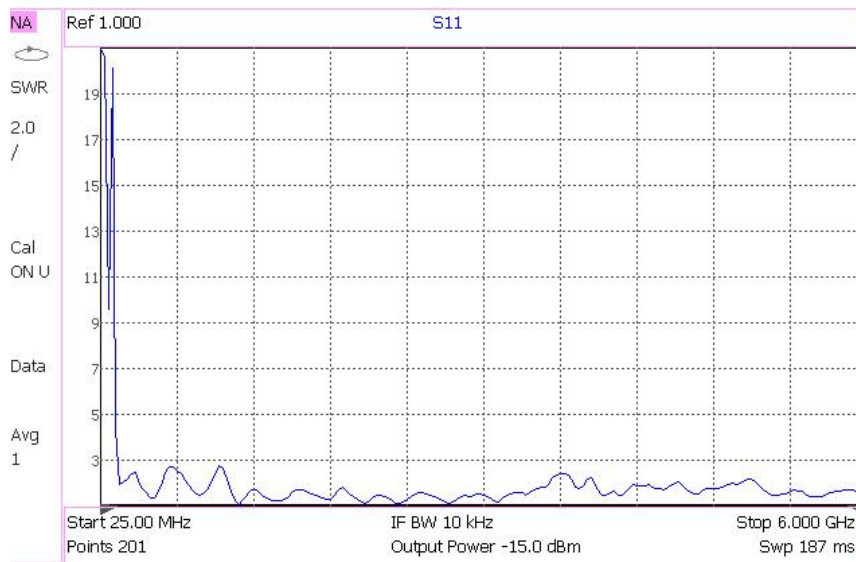
### ENVIRONMENTAL SPECIFICATIONS:

Operating Temperature	(-)32 to +70 Degrees Celsius
Storage Temperature	(-)40 to +80 Degrees Celsius
Humidity	0 to 95 % RH

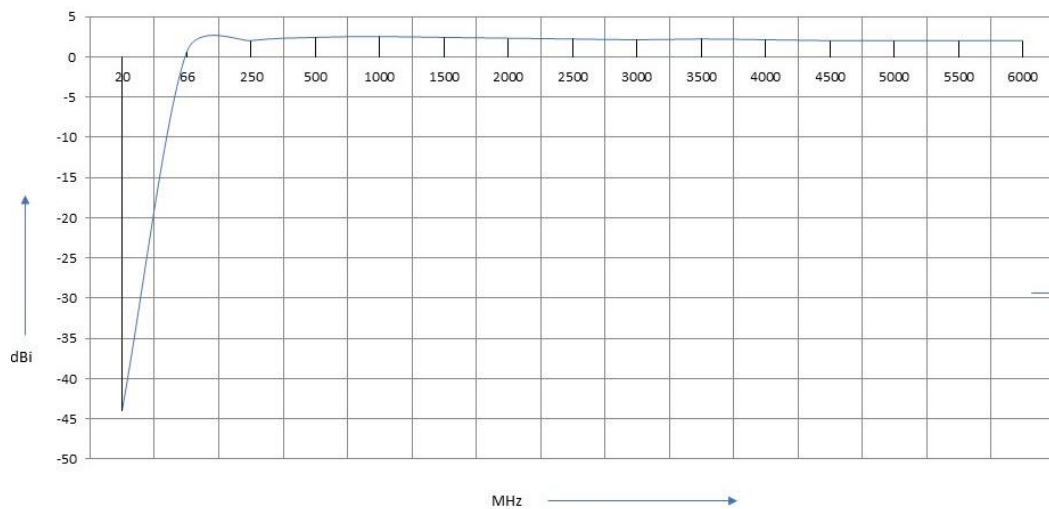


[Outline Drawing](#)

[Mounting Bracket Image](#)



[Frequency Vs VSWR Curve Model # CWD-20-6000](#)



[Frequency Vs Gain Curve Model # CWD-20-6000](#)

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