



# ANTENNA EXPERTS

E-mail: [info@antennaexperts.in](mailto:info@antennaexperts.in)

Website: [www.antennaexperts.in](http://www.antennaexperts.in)

Model # CM-100-500

Frequency 100 – 500 MHz.

2.15 dBi Gain

## VHF BROADBAND VERTICAL CONICAL MONOPOLE ANTENNA

**DESIGN FEATURES:** The CM-100-500 conical monopole antenna is designed to propagate line of sight communications and is characterized by stable radiation pattern with their long term reliability and stability of electrical characteristics. CM-100-500 is an excellent choice for omnidirectional VHF communications for RCIED jamming application for vehicular platform. Due to its large diameter to height ratio the VHF vertical conical monopole has excellent VSWR and omnidirectional radiation pattern performance over 100-500MHz frequency range. VHF broadband vertical conical monopole antenna provides optimum performance over 100-500MHz band, eliminating the requirement of multiple antennas or an ATU, minimizing the cost and setup requirements. The antenna is supplied with removable radiating elements for easy of shipping and handling which can be assembled in the field with simple hand tools.



**CONSTRUCTIONS:** The antenna uses 6063T6 ultra corrosion resistant architectural anodized aluminum alloy, and does not require any field tuning or adjustments. The complete antenna is supplied with olive green colour powder coating finish to protect it further from severe environmental conditions. The antenna is supplied with standard NATO 4 holes mounting pattern/flange at the base of antenna making it rigid to withstand tough MIL environmental condition. The N-Female termination of antenna is provided at the bottom of mounting flange. All insulators are made of Teflon and delrin. All nuts, bolts, split washers and fasteners are made of type 316 marine grade stainless steel. Particular attention has been paid to the matching of dissimilar metals to minimize electro-chemical corrosion as well as noise and inter-modulation components. The VHF conical monopole antenna are supplied in kit form dismantle condition.

### ELECTRICAL SPECIFICATIONS:

Frequency Range	100-500 MHz.
Gain	2.15 dBi
Bandwidth	100-500 MHz.
Polarization	Vertical
Input Impedance	50 Ohms.
Radiation Pattern	Omni-directional
VSWR – Better Than	3 : 1
RF Power Handling Capacity	500 Watts
Input Termination	N-Female

### MECHANICAL SPECIFICATIONS:

Gross Weight	5 Kgs.
Overall Height of Antenna	650mm
Overall Width of Antenna	700mm
Radiating Elements Materials	6063T6 Aluminum Alloy
No. of Radiating Elements	12 Nos.
Diameter of Radiating Elements	12.7 mm
Mounting Type	Standard NATO 4 Holes Pattern
Fastener Materials	Marine Grade Stainless Steel
Wind Pressure	160 Km/Hr.
Antenna Finishing	Military Olive Green Powder Coated
Insulator Materials	Teflon & Delrin
Shipping Length	750mm

### ENVIRONMENTAL SPECIFICATIONS:

Operating Temperature	(-)30 to +70 Degrees Celsius
Storage Temperature	(-)40 to +80 Degrees Celsius
Humidity	0 to 95% RH

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