



# ANTENNA EXPERTS

E-mail: [info@antennaexperts.in](mailto:info@antennaexperts.in) Website: [www.antennaexperts.in](http://www.antennaexperts.in)

Model # BVM-20-100                      20 – 100 MHz.                      -5 dBi Gain

## VHF Vehicular Mount Omni-Directional Antenna

**DESIGN FEATURES:** BVM-20-100 Omni-directional VHF vehicular mount antenna is rugged all weather model, enclosed in a ABS radome, uses high class brass and aluminum alloy and does not require any field tuning or adjustments. The N-Female termination of antenna is fixed at the bottom of the mounting flange for complete weather protection. Cylindrical shell/enclosure is used for low wind loading and for minimal effect of ice formation on the antenna operation as well as providing an aesthetically pleasing appearance.

**CONSTRUCTIONS:** The VHF vehicle mount antenna is consisting of large diameter radiating elements stacked vertically and enclosed in ABS radome. The special “Choke and Spark Gap” technique is used for smooth VSWR over the entire 20-100 MHz. frequency band. The UV resistant ABS enclosure has excellent transparency for RF signals and enough strength to withstand specified wind loads. The antenna doesn’t require any ground plane for its operation and is independent from ground. Although a 3m x 3m ground plane is recommended for higher preferences. The compact size of omni-directional VHF antenna allows easy handling, shipping. and highly suitable for vehicular application without having the requirement of multiple antennas.

**MOUNTING PROCEDURES:** This vehicle mount antenna is supplied with standard NATO 4 holes pattern with biconical spring fitted at the base of antenna for better flexibility. The mounting hardware is made of marine grade stainless steel. Customized mounting arrangements can also be supplied on request.

### ELECTRICAL SPECIFICATIONS:

Frequency Range	20 - 100 MHz.
Gain	-5 dBi. Typical
Bandwidth	Entire Band
Polarization	Vertical
Input Impedance	50 Ohms
Radiation Pattern	Omni-directional
-3 dB. Vertical Beam-width	78 Degrees
VSWR – better than	3.5:1
RF Power Handling Capacity	250 Watts.
Input Termination	N-Female

### MECHANICAL SPECIFICATIONS:

Materials	Brass & Aluminum Alloy
Mounting Hardware -Materials	Marine Grade Stainless Steel
Wind Rating	150 Km/Hr.
Overall Length	2.0 Meters
Shipping Length	2.1 Meters
Maximum Mount Pipe Diameter	NATO 4 holes with spring
Enclosure Materials	UV Resistant ABS
Enclosure Length	180 mm
Ground Plane Required	3m x 3m for higher efficiency
Net Weight	3 Kgs.
Gross Weight	3.5 Kgs.

### 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 Drawing & frequency Vs VSWR of antenna.

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