

Application

The VHF30108VM is a rigid mount dipole whip antenna which has been developed for shipboard applications.

The antenna is ground independent and operates over the full 30-108MHz frequency band. VHF30108VM has been fully tested to meet the demands of equipment used in a shipboard military environment.

Electrical Specification

Frequency range	30 - 108 MHz
VSWR	See diagram
Nominal impedance	50 ohm
Power rating	100 W
Gain	See diagram
Radiation pattern	Azimuth: Omnidirectional Elevation: See overleaf
Polarisation	Vertical
Connector	BNC Female, others on request

Mechanical specification

Design	Centre fed dipole. Radiating elements completely enclosed in epoxy/fibreglass laminate. Metal parts are plated brass and stainless steel.
Length [#]	Total: 3.2 m (126 in)
	Lower Whip: 1.8 m (71 in)
	Upper Whip: 1.45 m (57 in)
Weight	Whips - 1.65 kg (3.6 lbs)
	Complete - 2.65 kg (5.8 lbs)*
Wind rating	55 m/s = 125 mph
Finish	Polyurethane lacquer.
Colour	Customer Specified
Installation	See base option table
Temperature range	-55 °C, +71 °C; -67 °F, +160 °F

* Weight with standard NATO 4 hole rigid base. Base options specified overleaf. # Nominal dimensions subject to manufacturing tolerances.

4 hole base (C)



VHF30108VM Ship.pub (01/25-1) VHF30108VM-MIL-SD-0008.pub

www.comrod.com

Radiation Diagram, Elevation:





60MHz

88MHz

VSWR



Gain, relative $\frac{1}{\lambda}$ whip on GP



www.comrod.com

Antenna Base Options

Bases are available to suit most installations including vehicle, mast and shelter mounting. Many are available with optional L1 & L1/L2 GPS. All bases are supplied with a protective top cap. See below for mounting options:-



NATO 4-hole Spring 4 x M10 or 3/8" Bolts on 114mm (4.5in) PCD Base diameter 140mm (5.5in) Base height 215mm (8.5in)



NATO 4-hole Spring GPS 4 x M10 or 3/8" Bolts on 114mm (4.5in) PCD Base diameter 140mm (5.5in) Base height 240mm (9.5in)



NATO 4-hole Rigid 4 x M10 or 3/8" Bolts on 114mm PCD Base diameter 140mm (5.5in) Base height 100mm (4in)



NATO 4-hole Rigid GPS 4 x M10 or 3/8" Bolts on 114mm (4.5in) PCD Base diameter 140mm (5.5in) Base height 125mm (5in)

Bases A,B,C & D are also available with optional NATO 6-hole pattern 6 x M6 or 1/4" Bolts on 111mm (4.37in) PCD



Bases can be supplied painted to match the antenna element colour as an option.

Mast or Pole Mounting Options



Mast Mount Bracket Tube clamp to suit poles up to Ø65mm Tube Clamp Adaptor Clamp area diameter 38mm (1.5in) Clamp area length 80mm (3.2in) N-type female bottom connector



VHF30108VM shown in grey, pole mounted using mast mount bracket E

www.comrod.com