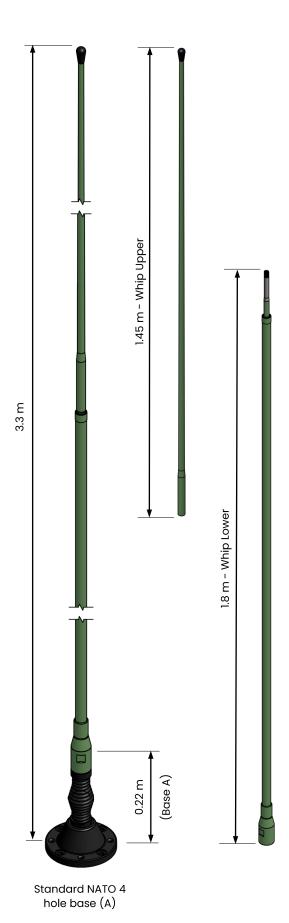
VHF30108VM

VHF sectional vehicle whip, dipole, 3.4 m, 30-108 MHz

Naval Antennas and Systems: Shipboard





Application

The VHF30108VM is a broadband VHF antenna designed for use on all modern in-service military platforms, including armoured or soft skin, metal chassis or composite, wheeled or tracked. Rigid versions are available for shipboard and fixed station applications. Brackets are also available for masts and pole mounting.

Bases are available for vehicle, mast and fixed mounting with optional L1 and L1/L2 GPS.

The antenna is a dipole design so does not require a ground plane to operate.

Electrical Specifications (Antenna)

Frequency Range	30 - 108 MHz	
VSWR	See diagram	
Nominal Impedance	50 Ω	
Power Rating	100 W	
Gain	See diagram	
Radiation Pattern	Azimuth: Omnidirectional Elevation: See overleaf	
Polarisation	Vertical	
Connector	BNC Female, others on request	

Mechanical Specifications

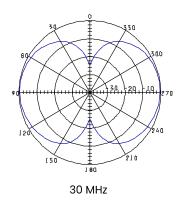
Design	Centre fed dipole. Radiating elements completely enclosed in epoxy/fibreglass laminate. Metal parts are plated brass and stainless steel.	
Length#	Total: 3.3 m Lower Whip: 1.8 m Upper Whip: 1.45 m Base (Option A): 0.22 m	
Weight	Whips - 1.65 kg (3.6 lbs) Complete - 3.4 kg (7.5 lbs)*	
Wind Rating	55 m/s	
Finish	Polyurethane lacquer	
Colour	Customer Specified	
Installation	See base option table	
Temperature Range	- 55°C to + 71°C	

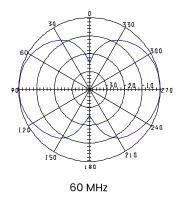
^{*} Weight with standard NATO 4 hole vehicle base. Base options specified overleaf. # Nominal dimensions subject to manufacturing tolerances.

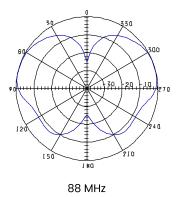
GPS Electrical Specifications (option)

Configuration	L1 GPS	L1/L2 GPS
Frequency Band	1575.42 ± 10 MHz	L1 1575.42 ± 10 MHz L2 1227.60 ± 10 MHz
Supply Voltage	2.7-5.5 V	2.7-5.5 V
Pre-amplifier	26.5 dB @ 5 V	26.5 dB @ 5 V
Noise Figure	2.5 dB	2.5 dB
Supply Current	< 40 mA	< 60 mA
Polarisation	RHCP	RHCP
Connector	SMA female	SMA female

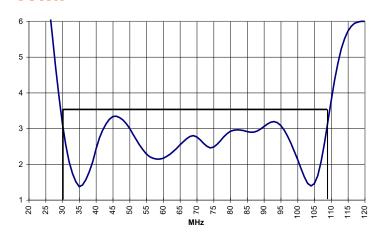
Radiation Diagram, Elevation







VSWR



Antenna Options

Product	Description
Whip Bag	Protective carrying bag for upper and lower whip sections.
Tie Down Kit	Allows the whip to be tied down to the vehicle while in motion.



Antenna Base Options

Bases are available to suit most installations including vehicle, mast and shelter mounting. Many are available with optional L1 and 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 114 mm PCD Base diameter 140 mm Base height 215 mm



NATO 4-hole Spring GPS 4 x M10 or 3/8" Bolts on 114 mm PCD Base diameter 140 mm Base height 240 mm



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



NATO 4-hole Rigid GPS 4 x M10 or 3/8" Bolts on 114 mm PCD Base diameter 140 mm Base height 125 mm

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



NATO 50 mm Thread with Spring Base diameter 74 mm Base height 188 mm



NATO 50 mm Thread GPS with Spring Base diameter 95 mm Base height 230 mm



NATO 50mm Thread Rigid Base diameter 74 mm Base height 60 mm



General Purpose Bulkhead Adaptor Mounting hole diameter 22 mm

Mast or Pole Mounting Options



Mast Mount Bracket 40 mm Socket 50 mm Socket Customer Specified



Κ

Mast Mount Bracket 24 mm Spigot 40 mm Spigot 50 mm Spigot Customer Specified



Mast Mount Bracket Tube clamp to suit poles up to Ø 65 mm



Tube Clamp Adaptor Clamp area diameter 38 mm Clamp area length 80 mm N-type female bottom connector



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



September 2018

All specifications are subject to change without notice
The information contained herein is for reference only and does not constitute a warranty of performance



