

### Application

The VHF3088VM is a VHF vehicle antenna designed for use on all modern in-service military platforms, including armoured or soft skin, metal chassis or composite, wheeled or tracked.

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

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

### Electrical Specification (Antenna)

Frequency range	30 - 88 MHz
VSWR	See diagram
Nominal impedance	50 ohm
Power rating	100 W cw
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 <sup>#</sup>	Total: 3295 mm Lower Whip: 1800 mm Upper Whip: 1450 mm Base (Option A): 220 mm
Weight	Whips - 1.65kg Complete - 3.4kg*
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 vehicle base. Base options specified overleaf.












# Nominal dimensions subject to manufacturing tolerances.

## GPS Electrical Specification

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

## Antenna Base Options

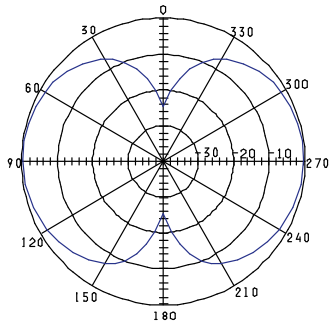
Bases are available to suit most installations including vehicle, mast and shelter mounting. Many are available with optional L1 & L1/L2 GPS. All bases are supplied with a protective top cap. See below for mounting options:-

<p><b>A</b></p>  <p>NATO 4-hole Spring 4 x M10 or 3/8" Bolts on 114mm PCD Base diameter 140mm Base height 215mm</p>	<p><b>B</b></p>  <p>NATO 4-hole Spring GPS 4 x M10 or 3/8" Bolts on 114mm PCD Base diameter 140mm Base height 240mm</p>	<p><b>C</b></p>  <p>NATO 4-hole Rigid 4 x M10 or 3/8" Bolts on 114mm PCD Base diameter 140mm Base height 100mm</p>	<p><b>D</b></p>  <p>NATO 4-hole Rigid GPS 4 x M10 or 3/8" Bolts on 114mm PCD Base diameter 140mm Base height 125mm</p>	 <p>Bases A,B,C &amp; D are also available with optional NATO 6-hole pattern 6 x M6 or 1/4" Bolts on 111mm PCD</p>	
<p><b>E</b></p>  <p>NATO 50mm Thread with Spring Base diameter 74mm Base height 188mm</p>	<p><b>F</b></p>  <p>NATO 50mm Thread GPS with Spring Base diameter 95mm Base height 230mm</p>	<p><b>G</b></p>  <p>NATO 50mm Thread Rigid Base diameter 74mm Base height 60mm</p>	<p><b>H</b></p>  <p>General Purpose Bulkhead Adaptor Mounting hole diameter 22mm</p>	<p><b>I</b></p>  <p>Mast Mount Bracket 40mm Socket 50mm Socket Customer Specified</p>	<p><b>J</b></p>  <p>Mast Mount Bracket 24mm Spigot 40mm Spigot 50mm Spigot Customer Specified</p>

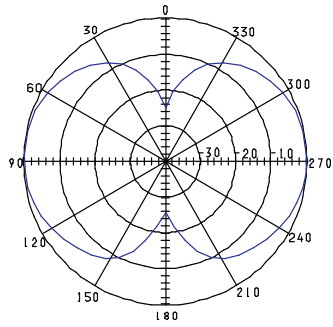
## Antenna Options

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.

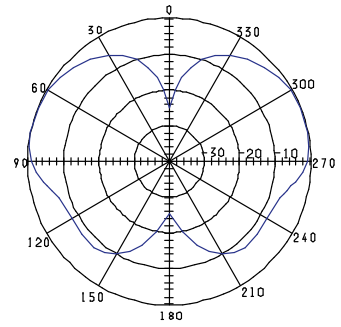
## Radiation Diagram, Elevation:



30MHz

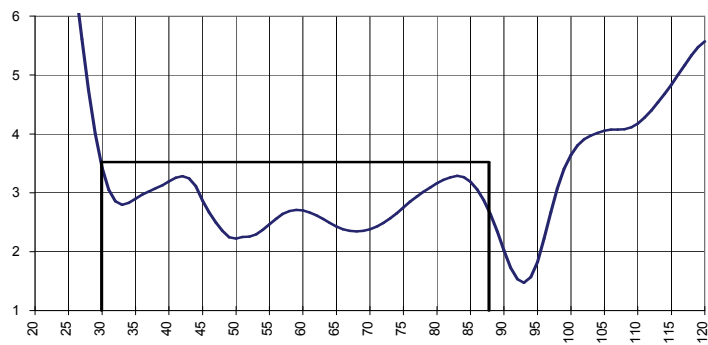


60MHz



88MHz

## VSWR



## GAIN, relative to a $\frac{1}{4}\lambda$ whip on GP

