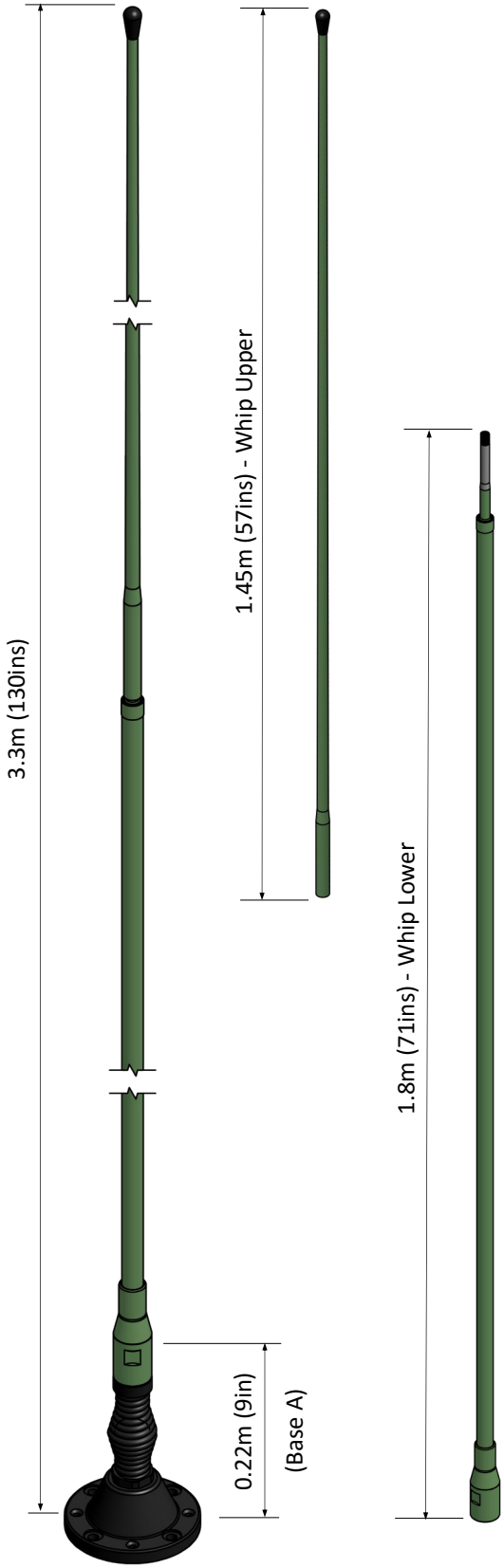
VHF3088VM

VHF Dipole Antenna, Vehicle, Mast & Fixed Mount
Base options including L1 & L1/L2 GPS



Standard NATO 4 hole vehicle base (A)

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
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 (130 in) Lower Whip: 1.8 m (71 in) Upper Whip: 1.45 m (57 in) Base (Option A): 0.22 m (9 in)
Weight	Whips - 1.65 kg (3.6 lbs) Complete - 3.4 kg (7.5 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 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:-

A

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)

B

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)

C

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

D

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)

E

NATO 50mm Thread
with Spring
Base diameter 74mm (2.9in)
Base height 188mm (7.4in)

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

F

NATO 50mm Thread GPS
with Spring
Base diameter 95mm (3.7in)
Base height 230mm (9in)

G

NATO 50mm Thread
Rigid
Base diameter 74mm
(2.9in)
Base height 60mm
(2.4in)

H

General Purpose
Bulkhead Adaptor
Mounting hole diameter
22mm (0.87in)

I

Mast Mount Bracket
40mm (1.57in) Socket
50mm (1.97in) Socket
Customer Specified

J

Mast Mount Bracket
24mm (0.94in) Spigot
40mm (1.57in) Spigot
50mm (1.97in) Spigot
Customer Specified

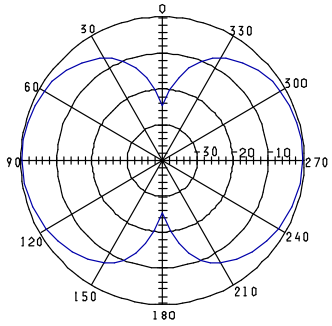
K

AMX85 Mast Mount Bracket
To fit Comrod AMX85 mast
sections

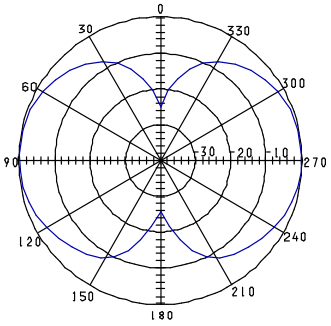
Antenna Options

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.

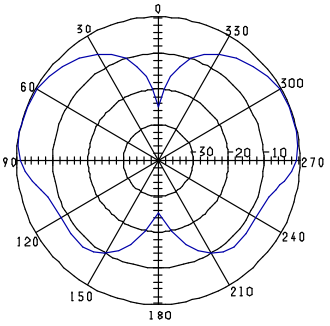
Radiation Diagram, Elevation:



30MHz

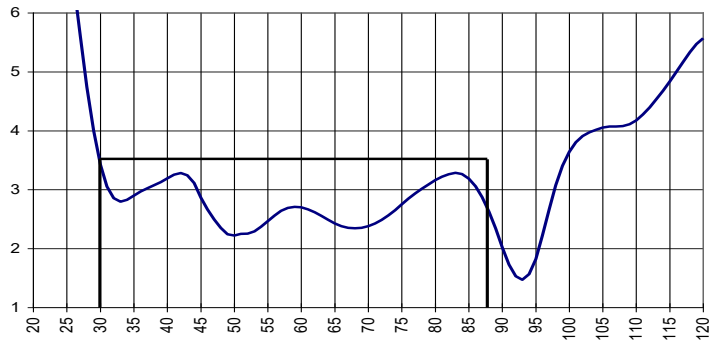


60MHz



88MHz

VSWR



GAIN, relative to a ¼λ whip on GP