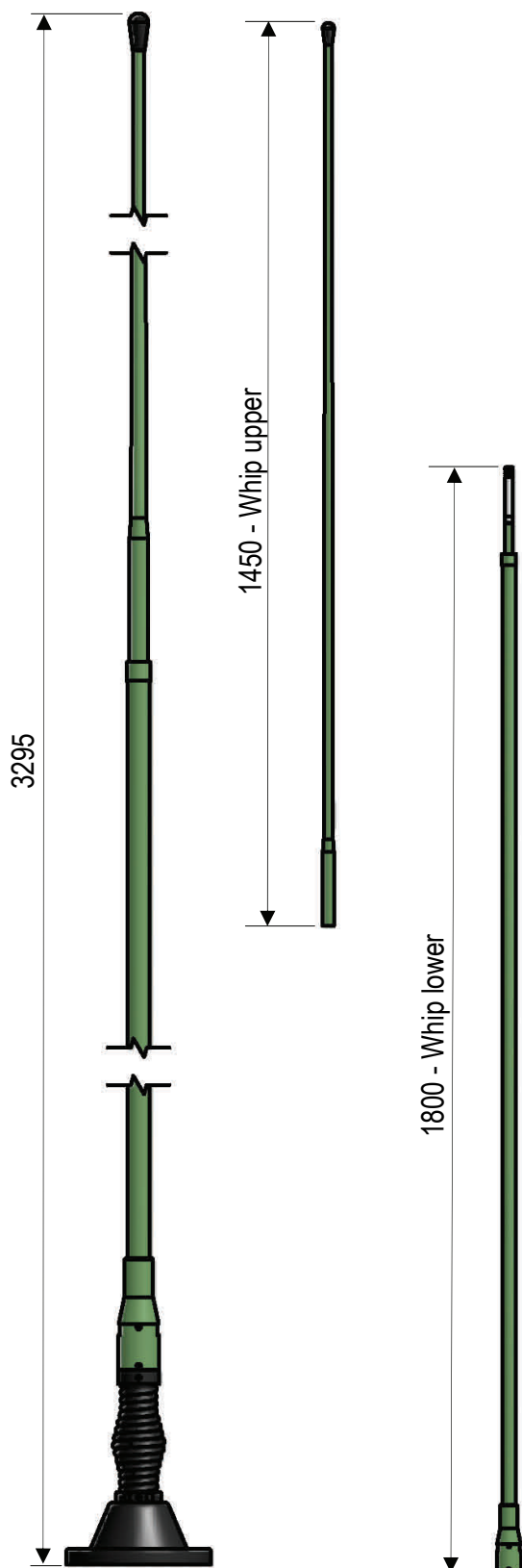


# COMROD VHF3088VM

## VHF Broadband Antenna, optional with GPS



### Application:

- \* 30 - 88 MHz
- \* Designed for operation on all kinds of vehicles including Jeeps, Trucks and other armoured vehicles
- \* Suitable for operation on shelters and to be mounted on masts or in other permanent installations
- \* Different kinds of bases available, with or without spring for flexible or rigid installations
- \* No ground plane needed
- \* No tuning electronics in the base
- \* No tuning required

### Electrical specifications:

Frequency range	30 - 88 MHz
VSWR	see diagram, overleaf
Nominal impedance	50 ohm
Power rating	100 W cw
Gain	see diagram, overleaf
Radiation pattern	Azimuth: Omnidirectional Elevation: See overleaf
Polarization	Vertical
Connector	to be specified

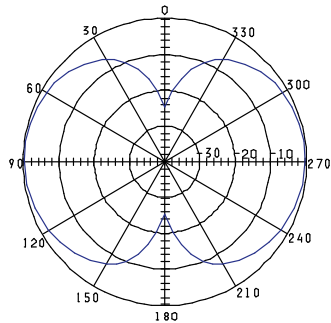
### GPS specifications:

GPS frequency range:	L1, 1575.42 ± 10MHz
GPS preamplifier gain:	26.5 dB
GPS noise figure:	2.5dB
GPS supply voltage:	5.0 ± 0.5V
GPS supply current:	< 40mA
Connector VHF:	BNC female
GPS:	SMA female

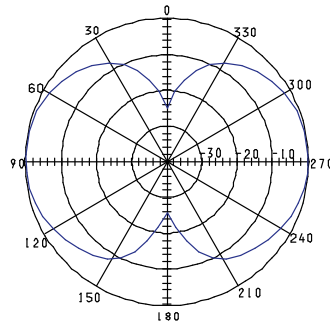
### Mechanical specifications:

Design	Centerfed dipole. Radiating elements completely enclosed in epoxy/fibreglass laminate. Metal parts are brass and stainless
Length, mounted	3.1 m, 3.3m with base 1.
Weight	1.65kg, ex. base, 3.4kg with base 1.
Wind rating	55 m/s = 125 mph
Finish	Polyurethane lacquer, olive drab.
Temperature range	-55 °C, +71 °C; -67 °F, +160 °F

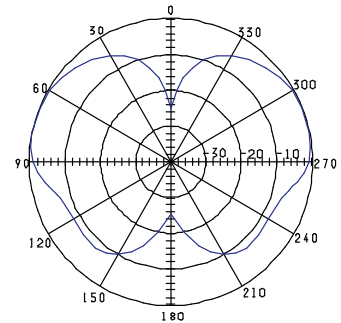
## Radiation Diagram, Elevation:



30MHz

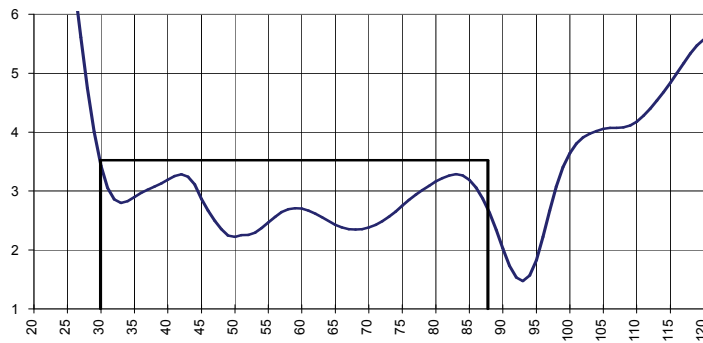


60MHz

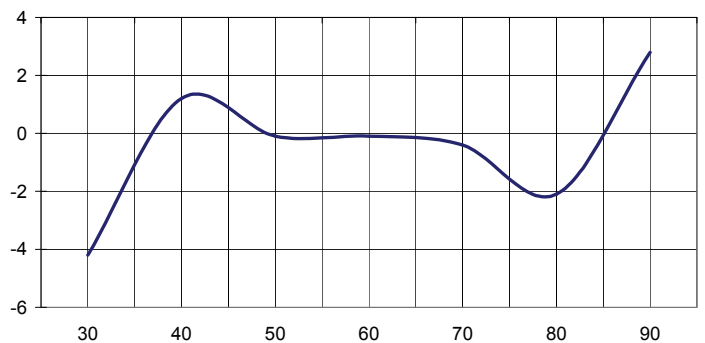


88MHz

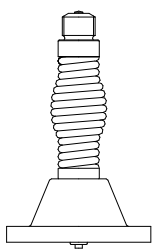
## VSWR



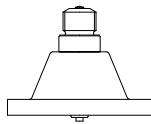
## GAIN, relative 1/4λ whip on GP



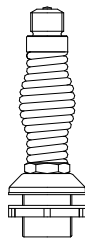
## Optional Bases:



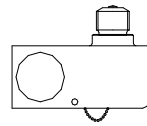
1



2



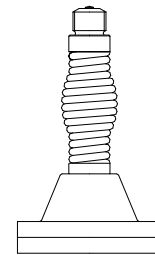
3



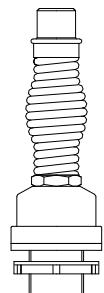
4



5



6



7

## Complete antennas

NATO codification	Description
5985-25-142-5447	Complete antenna, base no.1
5985-25-148-1010	Complete antenna, base no.3, ø7 spring
5985-25-149-7063	Complete antenna, base no.3, ø8 spring
5985-25-147-5313	Complete antenna, base no.6
5985-25-149-7064	Complete antenna, base no.7, ø8 spring, GPS L1
5985-25-149-3700	Complete antenna, base no.7, ø7 spring, GPS L1
5985-25-137-5052	Complete antenna, base no.2
5985-25-152-5180	Complete antenna, base no.7, ø8 spring, GPS L1/L2

## Parts:

NATO codification	Description
5985-25-142-7958	Upper whip section
5985-25-142-7959	Lower whip section
5985-25-142-7956	Base-1, NATO base with coil spring, BNC
5985-25-145-5084	Base-2, NATO Base without coil spring
5985-25-148-1097	Base-3, Ø 50 mm base with coil spring, BNC, spring ø7
5985-25-149-7065	Base-3, Ø 50 mm base with coil spring, BNC, spring ø8
5985-25-144-0952	Base-4, Mast mounting bracket, BNC
5985-25-145-5085	Base-5, General purpose bracket
5985-25-146-6408	Base-6, NATO base with coil spring, GPS L1
5985-25-149-3701	Base-7, Ø50mm NATO base with coil spring, GPS L1, spring ø7
5985-25-149-7066	Base-7, Ø50mm NATO base with coil spring, GPS L1, spring ø8
5985-25-152-5181	Base-7, Ø50mm NATO base with coil spring, GPS L1/L2, spring ø8

## Mounting:

The Mounting hardware makes VHF3088VM an extremely flexible and versatile system. The same antenna elements can be used for vehicles and mast mounting and for permanent installations. The antenna may easily be switched from one application to another without the use of tools.