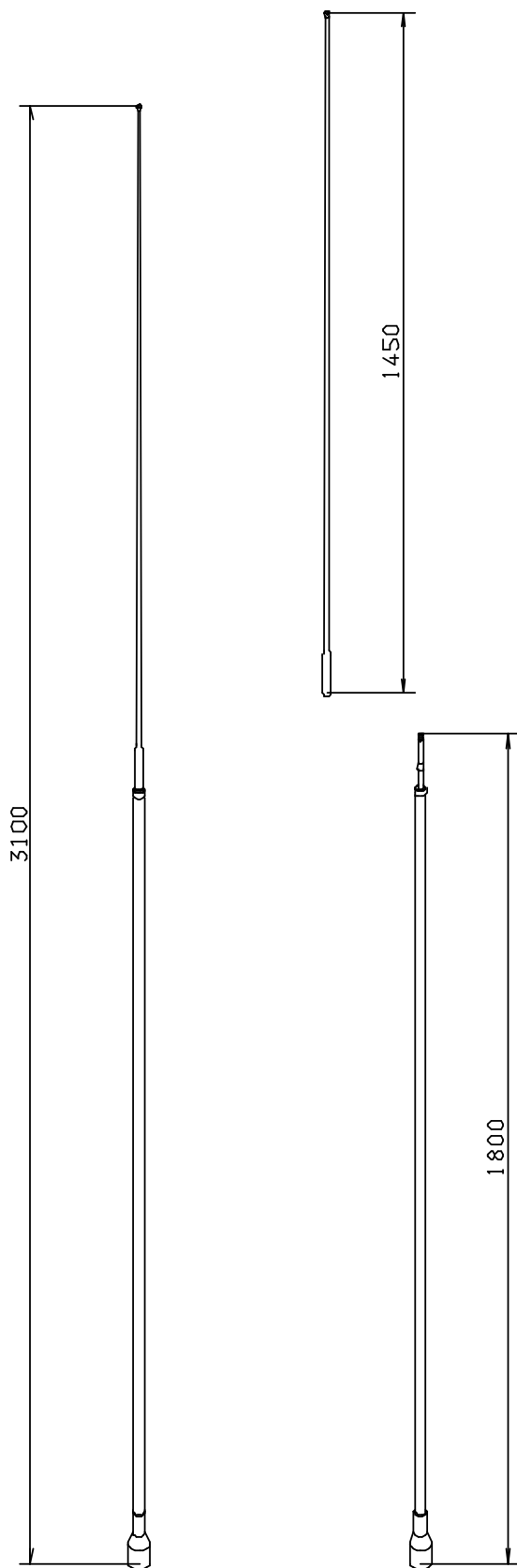


# COMROD VHF3088VM

## 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<br>Elevation: See overleaf |
| Polarization      | Vertical  |
| Connector         | to be specified                                     |

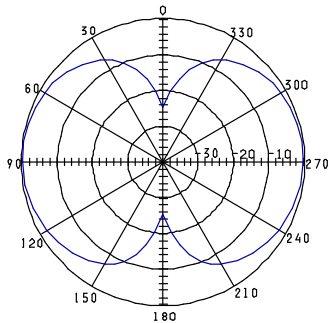
### GPS specifications:

|                        |                     |
|------------------------|---------------------|
| 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          |

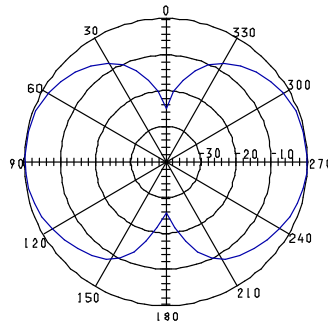
### Mechanical specifications:

|                   |  |
|-------------------|--|
| 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  |

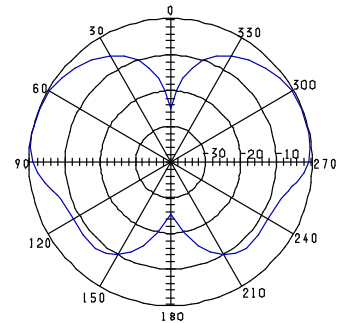
## Radiation Diagram, Elevation:



30MHz

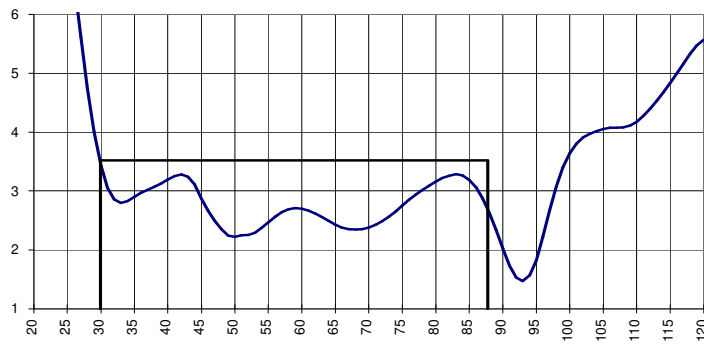


60MHz

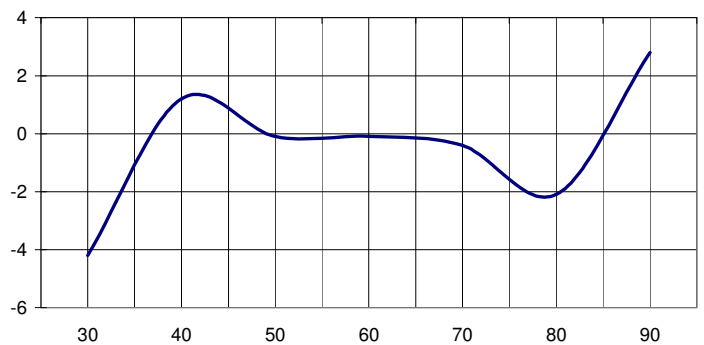


88MHz

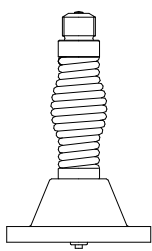
## VSWR



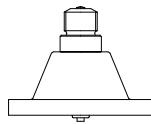
## GAIN, relative 1/4λ whip on GP



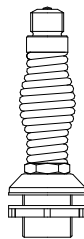
## Optional Bases:



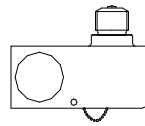
1



2



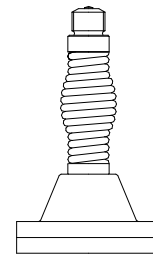
3



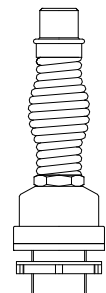
4



5



6



7

## Complete antennas

| NATO codification | Description                      |
|-------------------|----------------------------------|
| 5985-25-142-5447  | Complete antenna whip, base no.1 |
| 5985-25-149-7063  | Complete antenna whip, base no.3 |
| 5985-25-149-5313  | Complete antenna whip, base no.6 |
| 5985-25-147-7064  | Complete antenna whip, base no.7 |

## 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   |
| 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       |
| 5985-25-149-3701  | Base-7, Ø50mm NATO base with coil spring-GPS |

## 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.