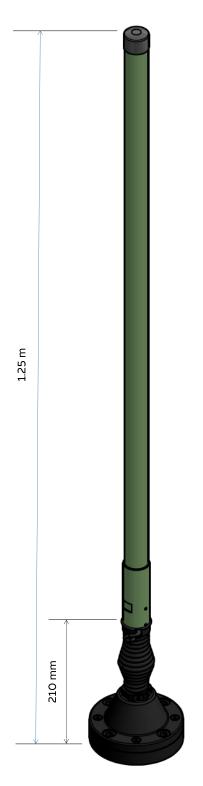
## VHF100512VM Series

VHF/UHF vehicle whip, dipole, 1.25 m, 100-512 MHz

**Tactical Antennas: Vehicle Mount** 





Spring Base (non GPS) shown See page 2 for base options

#### **Features**

- Broadband
- Frequency 100 512 MHz
- Standard NATO pattern base options
- Designed for use on all modern in-service military platforms, including armoured or soft skin, metal chassis or composite, wheeled or tracked
- No tuning required
- Diplexer (2 connector) option for use with two transceivers
- High voltage protection option
- L1 and L1/L2 GPS Options

## **Electrical Specifications**

| Frequency Range   | 100-512 MHz                   |  |
|-------------------|-------------------------------|--|
| VSWR              | ≤ 3.5                         |  |
| Nominal Impedance | 50 ohm                        |  |
| Power Rating      | 50 W +0.8 dB, 10 min          |  |
| Gain              | - 5 1.5 dBi, overleaf         |  |
| Radiation Pattern | Azimuth: Omnidirectional      |  |
| Polarisation      | Vertical                      |  |
| Connector         | BNC female, others on request |  |

## **Mechanical Specifications**

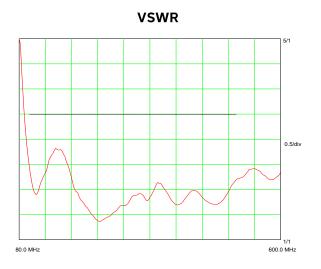
| Design            | Broadband centre fed dipole.<br>Radiating element completely enclosed in<br>epoxy/fibreglass laminate. Metal parts are<br>brass and stainless steel. |  |
|-------------------|--|--|
| Length *          | Total: 1.25 m<br>Whip: 1.05 m<br>Base: 0.23 m  |  |
| Weight *          | Total: 3.65 kg<br>Whip: 1.4 kg<br>Base: 2.25 kg  |  |
| Wind Rating       | 55 m/s = 201 km/h  |  |
| Finish            | Polyurethane lacquer, olive drab, other colours on request.  |  |
| Temperature Range | - 55°C to + 71°C   |  |
| Installation      | Standard 4 hole NATO base with spring (see overleaf for base options)  |  |

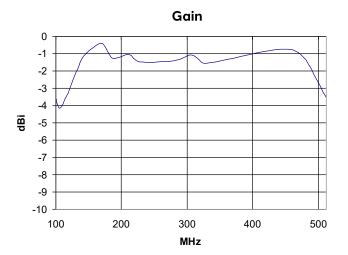
<sup>\*</sup> Standard 4-hole spring base type A

# **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 | < 20 mA          | < 42 mA             |
| Polarisation   | RHCP             | RHCP                |
| Connector      | SMA female       | SMA female          |

# **VSWR and Gain Curves**





## **Antenna Base Options**

Antenna bases are available to suit the user vehicle or shelter installation. Bases can be configured with the following options:-

- 1. L1 GPS
- 2. L1/L2 GPS
- 3. High voltage protection is available for selected bases



Standard CEF Connector (connector between the whip and base)



Optional VM Connector (connector between the whip and base)



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



NATO 4-hole Spring GPS 4 x M10 or 3/8" Bolts on 114 mm PCD Base diameter 140 mm Base height 280 mm



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



NATO 50 mm Thread Base diameter 95 mm



General Purpose Bulkhead Adaptor Mounting hole diameter 22 mm



Mast Mount Brackets
40 mm Socket
50 mm Socket
Comrod AMX85 Mast
Customer Specified

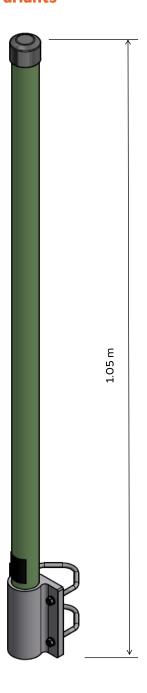


Mast Mount Brackets
24 mm Spigot
40 mm Spigot
50 mm Spigot
Customer Specified



AMX85 Mast Mount Bracket To fit Comrod AMX85 mast sections

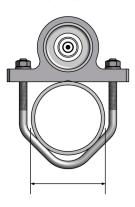
## **Antenna Variants**



### VHF100512M

A permanent mast mount version is also available.

Supplied with a fixed mounting plate and U-bolts. N type female or BNC female connector.



Mounting pole diameter 33-60 mm

March 2023



