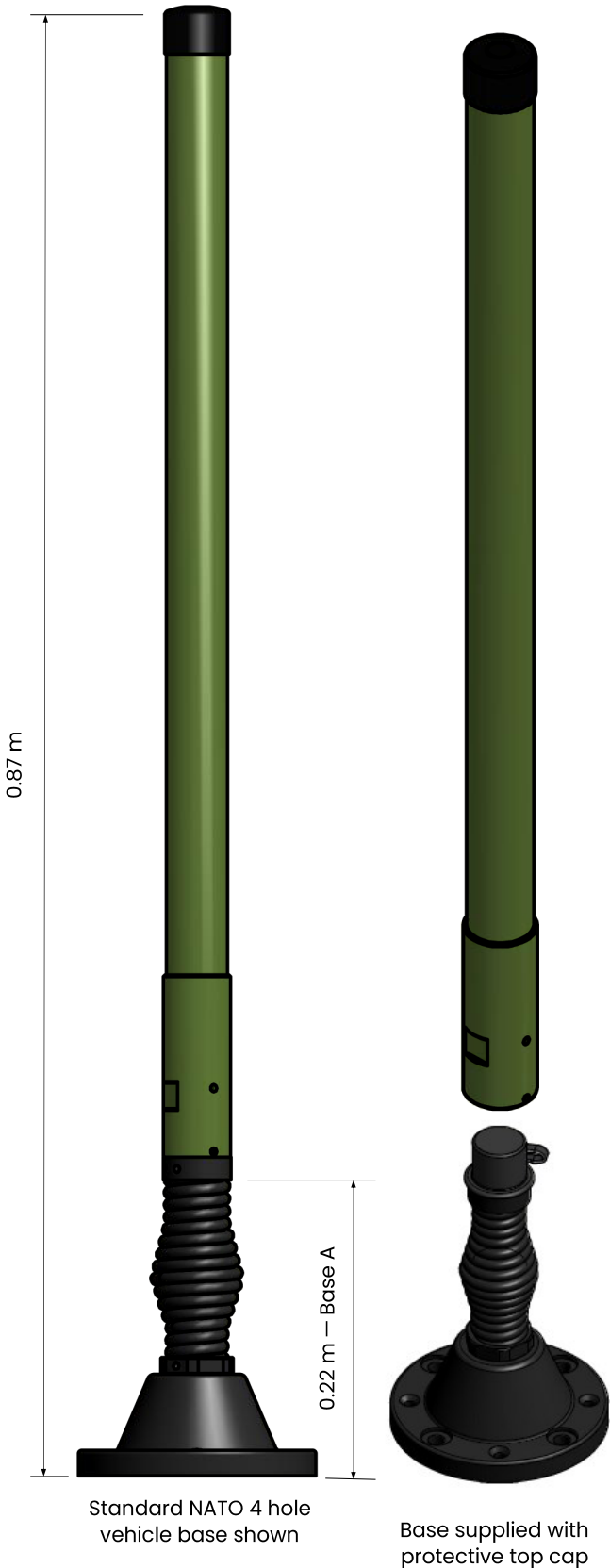


# UHF225450VM/HG

UHF vehicle whip, dipole, 0.87 m, 225-450 MHz  
Tactical Antennas: Tactical and Base Station



## Application

The UHF225450VM/HG is a UHF 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 and L1/L2 GPS.

## Electrical Specifications (Antenna)

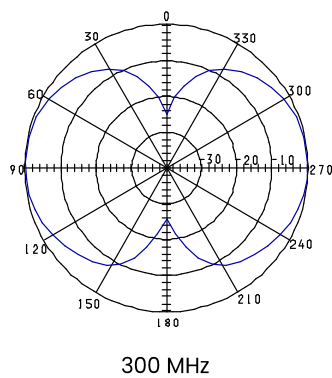
|                   |  |
|-------------------|--|
| Frequency Range   | 225 – 450 MHz                                      |
| VSWR              | < 3:1  |
| Nominal Impedance | 50 Ω   |
| Power Rating      | 100 W  |
| Gain              | 0.5 ... 2 dBi                                      |
| Radiation Pattern | Azimuth: Omnidirectional<br>Elevation: See diagram |
| 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:  | 0.87 m               |
|                   | Element:  | 0.68 m               |
|                   | Base (Option A):  | 0.22 m               |
| Weight            | Whips:  | 1.1 kg               |
|                   | Complete:   | 2.85 kg <sup>#</sup> |
| Wind Rating       | 55 m/s = 201 km/h   |                      |
| Finish            | Polyurethane lacquer  |                      |
| Colour            | Customer Specified  |                      |
| Installation      | See base option table   |                      |
| Temperature Range | – 55°C to + 71°C  |                      |

<sup>#</sup> Weight with standard NATO 4 hole vehicle base. Base options specified overleaf.

Radiation Diagram, Elevation



GPS Electrical Specifications (Option)

| Configuration  | L1 GPS           | L1/L2 GPS                                  |
|----------------|------------------|--|
| Frequency Band | 1575.42 ± 10 MHz | L1 1575.42 ± 10 MHz<br>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 | < 40 mA          | < 60 mA                                    |
| 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 and L1/L2 GPS. All bases are supplied with a protective top cap. See below for mounting options:-



NATO 4-hole Spring  
4 x M10 or 3/8" Bolts  
on 114 mm PCD  
Base diameter 140 mm  
Base height 215 mm



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



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



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



Bases A, B, C and D are also  
available with optional  
NATO 6-hole pattern  
6 x M6 or 1/4" Bolts  
on 111 mm PCD



NATO 50 mm Thread  
with Spring  
Base diameter 74 mm  
Base height 188 mm



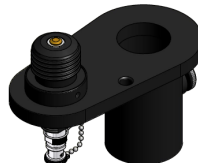
NATO 50 mm Thread  
GPS with Spring  
Base diameter 95 mm  
Base height 230 mm



NATO 50 mm Thread  
Rigid  
Base diameter 74 mm  
Base height 60 mm



General Purpose  
Bulkhead Adaptor  
Mounting hole  
diameter 22 mm



Mast Mount Bracket  
40 mm Socket  
42 mm Socket  
50 mm Socket  
55 mm Socket  
Customer Specified

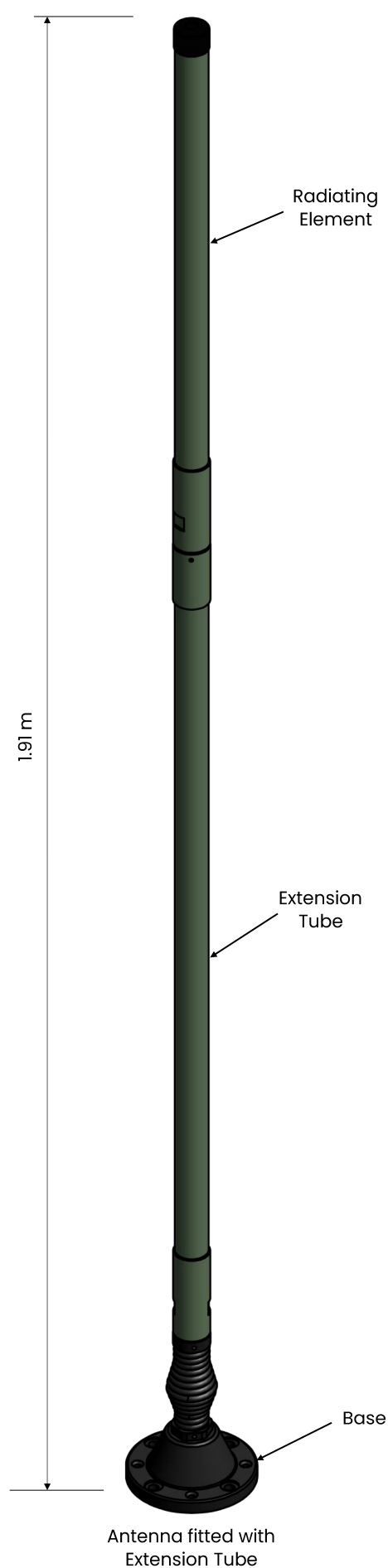
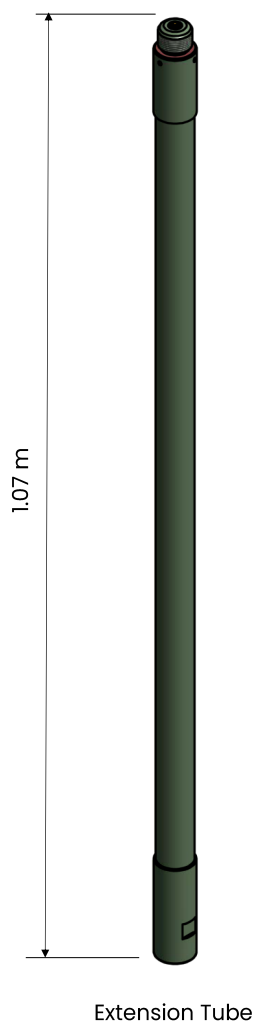


Mast Mount Bracket  
24 mm Spigot  
40 mm Spigot  
50 mm Spigot  
Customer Specified

## Optional Extension Tube

An extension tube is available to raise the height of the radiating element by 1 metre. This can be used if the radiating element on the standard base is too close to any metallic components causing potential radiation pattern distortion.

The extension fits in between the top of the base and the bottom of the radiating element. It can be fitted onto all the base options listed.



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All specifications are subject to change without notice  
The information contained herein is for reference only and does not constitute a warranty of performance

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