

Application

The UHF225512VM/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 & L1/L2 GPS.

Electrical Specification

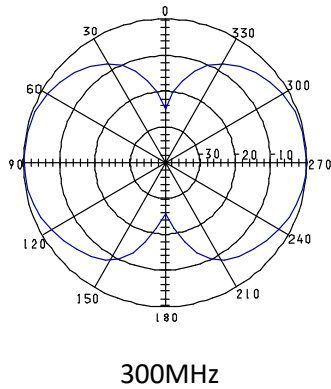
Frequency range	225 - 512 MHz
VSWR	<3.5:1
Nominal impedance	50 ohm
Power rating	100W
Gain	0.5 ... 2 dBi
Radiation pattern	Azimuth: Omnidirectional Elevation: See diagram
Polarisation	Vertical
Connector	BNC Female, others on request

Mechanical specification

Design	Centre fed dipole. Radiating elements completely enclosed in epoxy/fibreglass laminate. Metal parts are plated brass and stainless steel.
Length	Total: 0.87m (34 in) Element: 0.68m (27 in) Base: 0.22m (8.6 in)*
Weight	Whip: 1.1 kg (2.4 lbs) Base: 2.85 kg (6.3 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 (A). Base options specified overleaf.

Typical Radiation Diagram, Elevation



GPS Electrical Specification (Option)

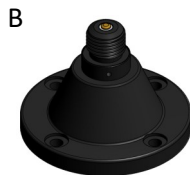
Configuration	L1 GPS	L1/L2 GPS
Frequency Band	1575.42 ± 10 MHz	L1 - 1575.42 ± 10 MHz L2 - 1227.60 ± 10 MHz
Supply Voltage	2.7-5.5V	2.7-5.5V
Pre-amplifier	26.5 dB @ 5V	26.5 dB @ 5V
Noise Figure	2.5dB	2.5dB
Supply Current	< 40mA	< 60mA
Polarisation	RHCP	RHCP
Connector	SMA female	SMA female

Base Options

Below are a small selection of bases available for the VHF136174VM. Spring and rigid bases are available for vehicle, shelter, mast and pole mounting. Please contact Comrod at sales@comrod.com with your specific requirement.



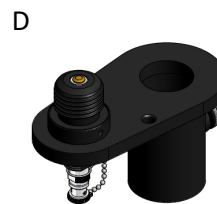
A
NATO 4-hole Spring
GPS option
4 x M10 or 3/8" Bolts
on 114mm (4.5in) PCD
Base diameter 140mm (5.5in)
Standard base height 215mm
(8.5in)



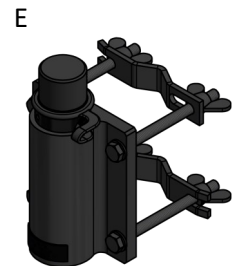
B
NATO 4-hole Rigid
GPS option
4 x M10 or 3/8" Bolts
on 114mm PCD
Base diameter 140mm (5.5in)
Standard base height 100mm
(4in)



C
NATO
50mm Thread
GPS option
Base diameter 95mm (3.74in)



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



E
Mast Mount Bracket
Tube clamp to suit poles
up to Ø65mm

Antenna element to base connector

The UHF225512VM-HG can be supplied with either a Comrod VM or CEF type connection between the antenna element and base/mounting. The connection shares the same size mounting thread but has a different internal RF contact. Both of these connectors are proprietary to Comrod.

