UHF225450VM/HG

UHF vehicle whip, dipole, 0.87 m, 225-450 MHz

Naval Antennas and Systems: Shipboard





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 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: Element Base (Option A):	0.87 m 0.68 m 0.22 m
Weight	Whips - 1.1 kg Complete - 2.85 kg [#]	
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	

[#] Weight with standard NATO 4 hole vehicle base. Base options specified overleaf.

Radiation Diagram, Elevation

300 MHz

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	< 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

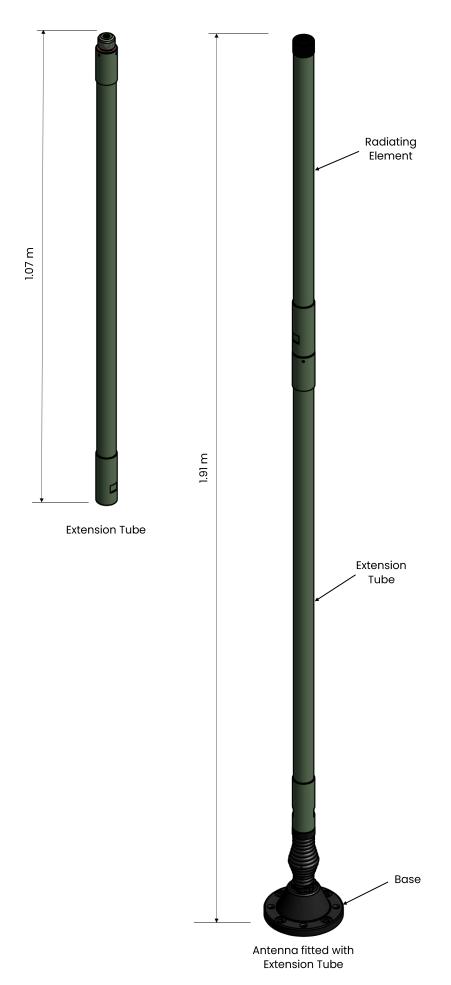


Mast Mount Bracket 24 mm Spigot 40 mm Spigot 50 mm Spigot Customer Specified

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.



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



