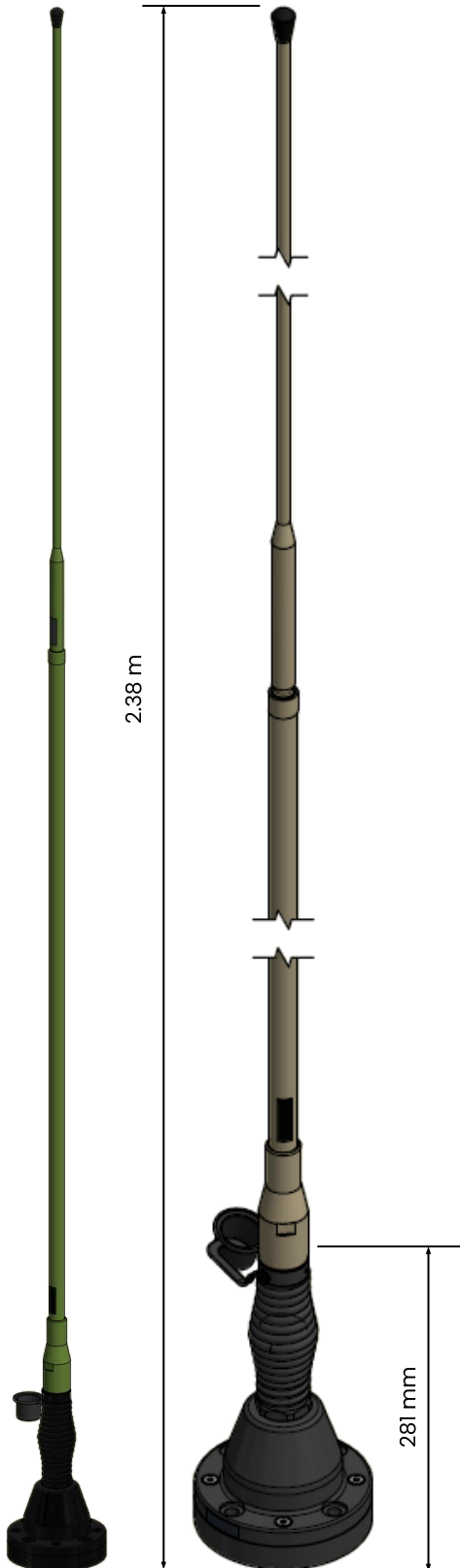


VHF30512DB-HG

VHF/UHF vehicle whip, high gain, monopole/dipole, 2.38 m,
30-88 MHz, 225-512 MHz

Tactical Antennas: Tactical and Base Station



Application

The VHF30512DB-HG is a tactical dual band 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 operates over the 30-88 MHz and 225-512 MHz frequency bands. The antenna is designed as a monopole in the VHF band, with performance similar to an end-fed VHF only antenna. The UHF part is a high gain dipole.

Bases are available to suit different mounting configurations with optional L1 and L1/L2 GPS.

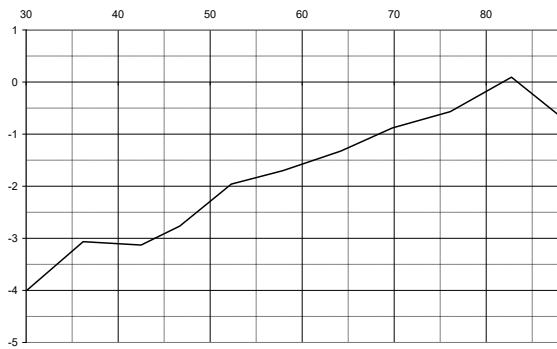
Electrical Specifications

Frequency Range	30-88 MHz, 225-512 MHz
VSWR	< 3.5
Nominal Impedance	50 Ω
Power Rating	VHF 100 W UHF 50W
Gain	See diagrams
Isolation	< -40 dB (VHF/UHF)
Radiation Pattern	Azimuth: Omnidirectional
Polarisation	Vertical
Connectors	Dual Feed: VHF - BNC female, UHF - BNC female Single Feed: VHF/UHF - BNC female GPS SMA female (option)

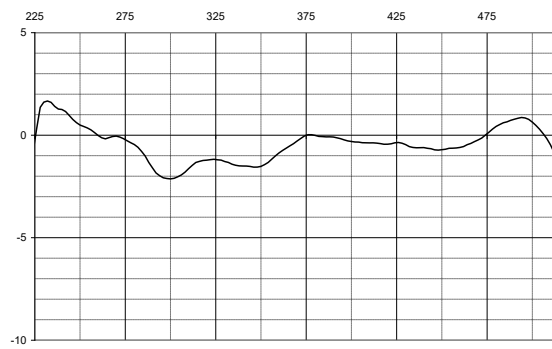
Mechanical Specifications

Design	Centre fed dipole for UHF. End-fed whip for VHF. Radiating element completely enclosed in epoxy/fibreglass laminate. Metal parts are plated brass and stainless steel.
Length	Total 2.38 m
Weight	Complete Antenna 4 kg Base 2.8 kg Lower Whip 1 kg Upper Whip 0.25 kg
Wind Rating	55 m/s = 201 kph
Finish	Polyurethane lacquer
Colour	Customer Specified
Temperature Range	- 55°C to + 71°C

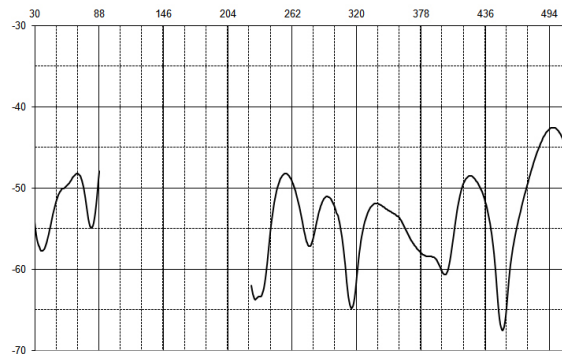
Gain and Isolation Plots



Typical VHF Gain in dB rel. $\lambda/4$ Whips



Typical UHF Gain in dBi



Typical Isolation between VHF/UHF Ports

Antenna Variants

Description	Antenna Base	Feed	VHF Connector	UHF Connector	GPS Connector
Dual Band 30–512 MHz	NATO 4 Hole	Dual	BNC Female	BNC Female	
Dual Band 30–512 MHz with L1 GPS	NATO 4 Hole	Dual	BNC Female	BNC Female	SMA female
Dual Band 30–512 MHz with L1/L2 GPS	NATO 4 Hole	Dual	BNC Female	BNC Female	SMA female
Dual Band 30–512 MHz	NATO 4 Hole	Single	BNC Female		
Dual Band 30–512 MHz with L1 GPS	NATO 4 Hole	Single	BNC Female		SMA female
Dual Band 30–512 MHz with L1/L2 GPS	NATO 4 Hole	Single	BNC Female		SMA female

GPS Electrical Specifications

	L1 GPS	L2 GPS
Frequency Band	1575.42 ± 10 MHz	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	< 60 mA	< 60 mA
Polarisation	RHCP	RHCP
Connector	SMA female	SMA female

February 2021

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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