VHF302000TB

VHF/UHF/L-Band vehicle whip, tri-band, monopole/dipole/dipole, 1.56 m, 30-88 MHz, 225-450 MHz 1200-2000 MHz

Tactical Antennas: Vehicle Mount



*Standard Base (GPS base option available)

Features

- Unique tri-band design (patented)
- 30-88 MHz, 225-450 MHz and 1200-2110 MHz
- 3 connectors, VHF, UHF and L-band
- High isolation between ports
- Designed for operation on all kinds of vehicles including armoured vehicles
- Suitable for operation on shelters and to be mounted on masts or in other permanent installations
- Rugged high quality antenna with a durable construction
- NATO flange base with spring
- UHF dipole and L-band antenna elements are located high up in the whip for maximum range. VHF requires a ground plane
- Optional single connector version with external triplexer
- Optional L1/L2 GPS installed in antenna base

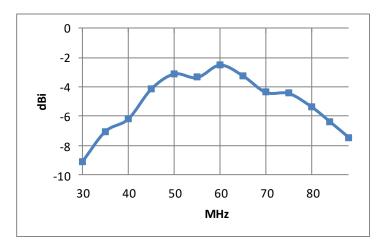
Electrical Specifications

Frequency Range	VHF:	30-88 MHz
	UHF:	225-450 MHz
	L-band:	1200-2110 MHz
	GPS (option): L1 - 1575.42 ± 10 MHz	
		L2 - 1227.60 ± 10 MHz
VSWR	VHF:	< 3.5:1
	UHF:	< 3.0:1
	L-band:	< 3.0:1
Port-to-Port Isolation	> 40 dB within bands (three connector base)	
Nominal Impedance	50 Ω	
Power Rating	VHF: 75 W, UHF: 75 W, L-Band: 50 W	
Gain	See graphs overleaf	
Radiation Pattern	Omnidirectional within ± 2 dB	
Polarisation	Vertical	
Connectors	VHF: BNC female, UHF: BNC female, L-Band: N female	
	Single connector (option): N female	
	GPS (option): SMA female	

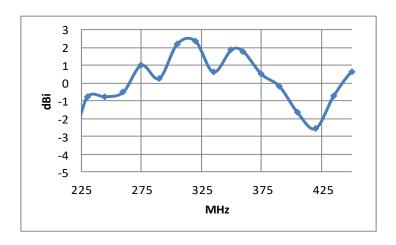
Mechanical Specifications

Design	VHF: End feed monopole. UHF: Dipole. L-Band dipole elements. Radiating elements completely enclosed in epoxy/fibreglass laminate. Metal parts are brass, aluminium and stainless steel.		
Length*	1.52 m		
Weight*	Whip: 1.4 kg, Base: 2.6 kg		
Wind Rating	55m/s		
Finish	Polyurethane lacquer		
Temperature Range	- 55°C to + 71°C		

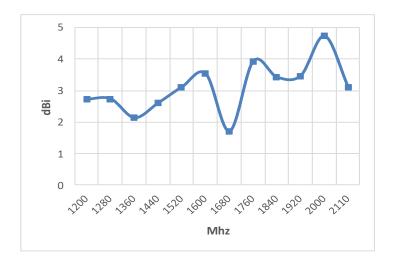
Gain Curves



VHF gain, dBi, in the centre of 1.2 x 1.2 m ground plane. Gain will improve significantly on a 3 x 3 m ground plane



UHF gain, dBi

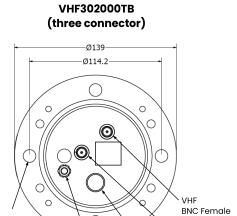


L-band gain, dBi



Nato 4-Hole Base



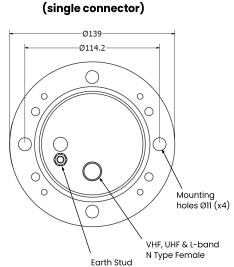


Earth Stud

BNC Female

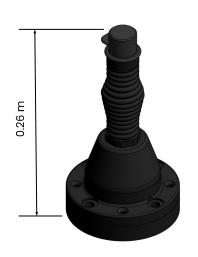
L-band

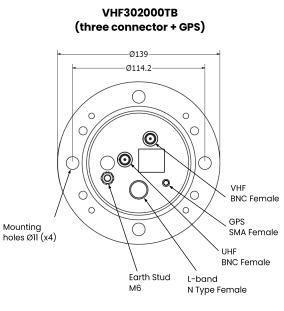
N Type Female

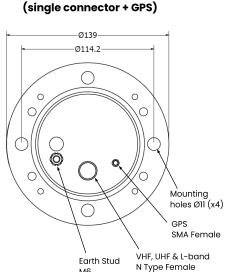


VHF302000TB-S

Nato 4-Hole GPS Base







М6

VHF302000TB-S

GPS Electrical Specifications

Mounting holes Ø11 (x4)

	L1 GPS	L2 GPS
Frequency Band	1575.42 ± 10 MHz	1227.60 ± 10 MHz
Power Supply	2.7-5.5 V @ <60mA, + centre	2.7-5.5 V @ <60mA, + centre
Amplifier Gain	25 dB, GPS	25 dB, GPS
Pre Amplifier	26.5 dB @ 5 V	26.5 dB @ 5 V
Noise Figure	2.5 dB	2.5 dB
Polarisation	RHCP	RHCP

November 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



