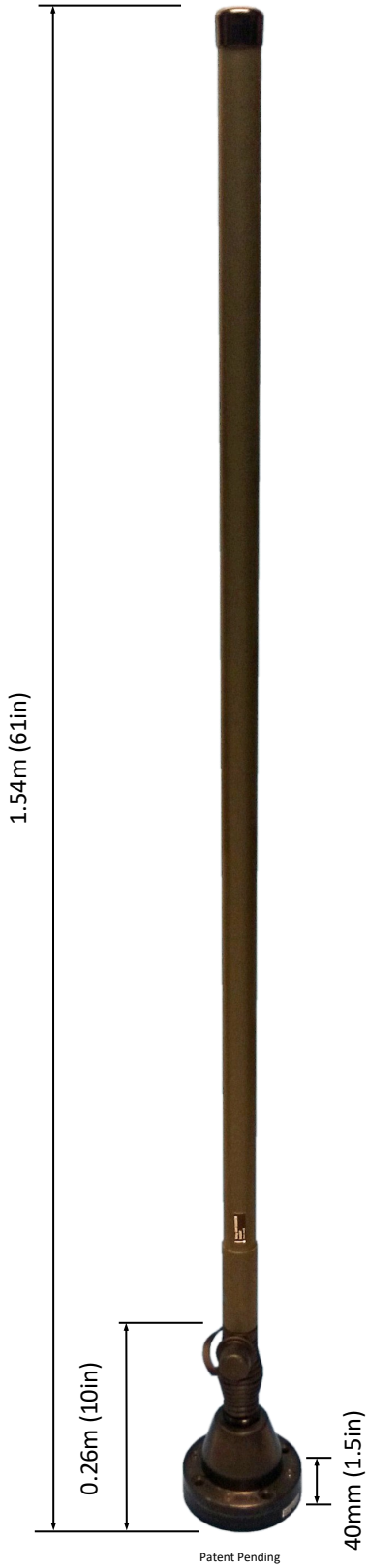
VHF302000TB/GPS

Quad-Band VHF, UHF & L-Band Antenna with L1/L2 GPS



Features

- Unique multi-band design (patent pending) with high isolation between ports
- 30-88MHz, 225-450MHz & 1200-2000MHz, also useable up to 2700MHz
- L1 & L2 GPS
- 4-ports VHF, UHF, L-band and GPS
- Designed for operation on all kinds of vehicles including armored 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

Electrical specification

Frequency range	VHF: 30-88MHz UHF: 225-450MHz L-band: 1200-2700MHz GPS: 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	> 40dB within bands
Nominal impedance	50Ω
Power rating	VHF: 75W UHF: 75W L-Band: 50W
Gain	See curves overleaf
Radiation pattern	Omnidirectional within ±2dB
Polarization	Vertical
Connector	VHF: BNC female UHF: BNC female L-band: N type female GPS: SMA female

Mechanical specification

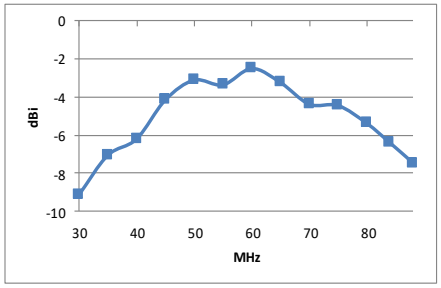
Design	VHF: End feed monopole. UHF: Dipole. L-band dipole elements. Radiating elements completely enclosed in epoxy/fiberglass laminate. GPS housed in the base. Metal parts are brass, aluminum and stainless steel.
Length	1.54m (61in)
Weight	Whip: 1.15kg (2.5lbs) Base: 2.65kg (5.8lbs)
Wind rating	55m/s (125mph)
Finish	Polyurethane lacquer
Temperature range	-55°C to +71°C, -67°F to +160°F

GPS Electrical Specification

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

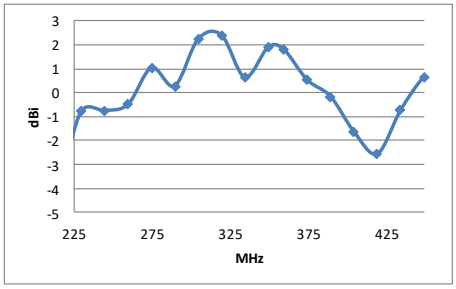
Gain Curves

VHF



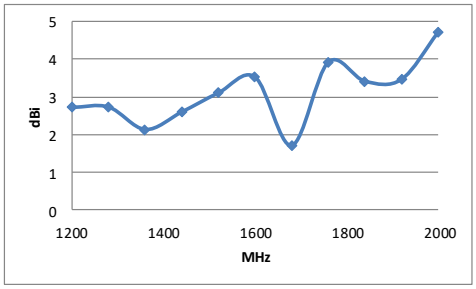
VHF gain, dB rel. 1/4 wave resonant whip in the centre of a 3 x 3m (10ft x 10ft) ground plane

UHF



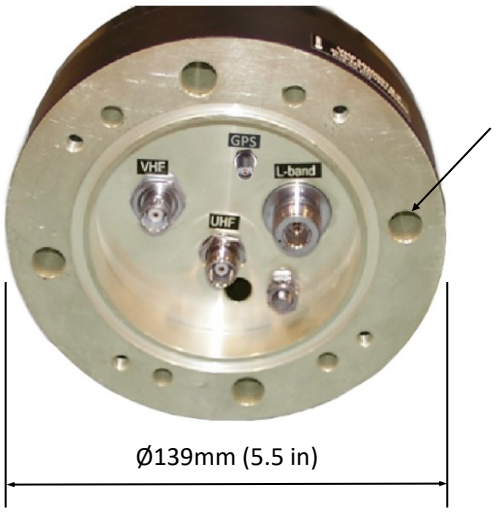
UHF gain, dBi

L-Band



L-Band gain, dBi

Base Detail



4 x Ø11 (0.43 in) mounting holes on 114.2 (4.5 in) PCD

Base mounting and RF connector detail

CEF connection on top of the base