

VHF302000TB-F

VHF/UHF/L-Band vehicle whip, tri-band, high isolation, monopole/dipole/dipole, 1.56 m, 30-88 MHz, 225-450 MHz, 1200-2110 MHz

Tactical Antennas: Vehicle Mount



Features

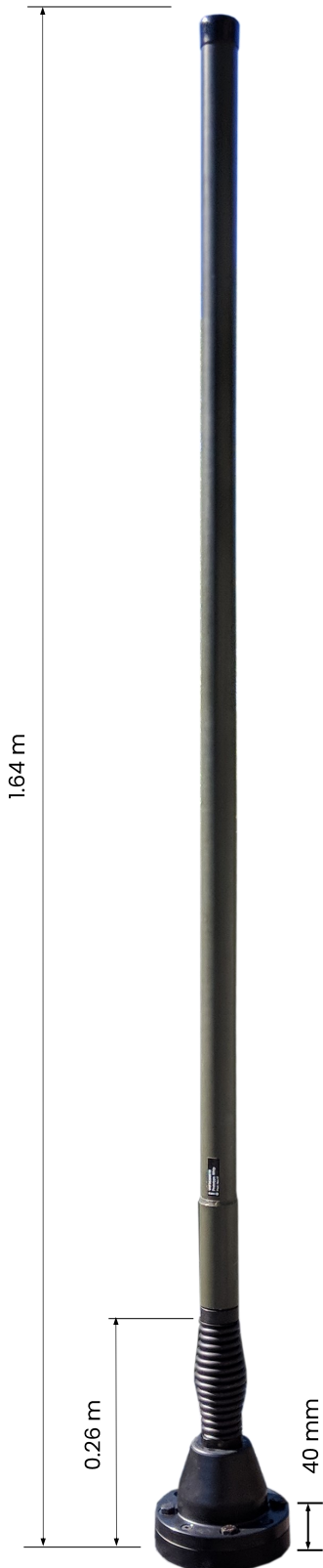
- Unique tri-band design (patented) with high isolation between ports
- 30-88 MHz, 225-450 MHz and 1200-2110 MHz
- 3-ports VHF, UHF and L-Band with high isolation between bands
- Designed for operation on all military platforms
- Suitable for operation on shelters, mounted on masts or in other permanent 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 L1/L2 GPS installed in antenna base

Electrical Specifications

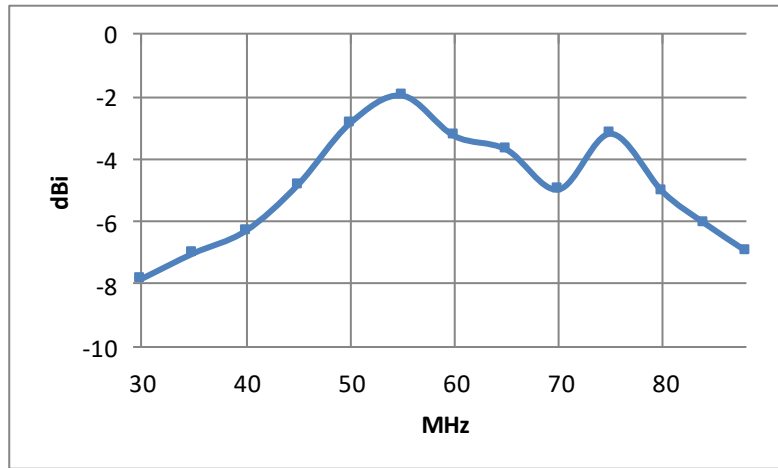
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|-------------------------------|--|
| Frequency Range | VHF: 30-88 MHz UHF: 225-450 MHz L-Band: 1200-2110 MHz GPS (option): L1 - 1575.42 ± 10 MHz L2 - 1227.60 ± 10 MHz |
| VSWR | VHF: < 3.5:1 UHF: < 3.0:1 L-Band: < 3.0:1 |
| Port-to-Port Isolation | UHF - L-Band : > 75 dB for UHF, > 55 dB for L-Band UHF - VHF: > 60 dB for VHF, > 65 dB for UHF VHF - L-Band: > 65 dB for VHF, > 55 dB for L-Band |
| 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 |
| Connector | VHF: BNC female UHF: TNC female L-Band: N female GPS (option): SMA female |

Mechanical Specifications

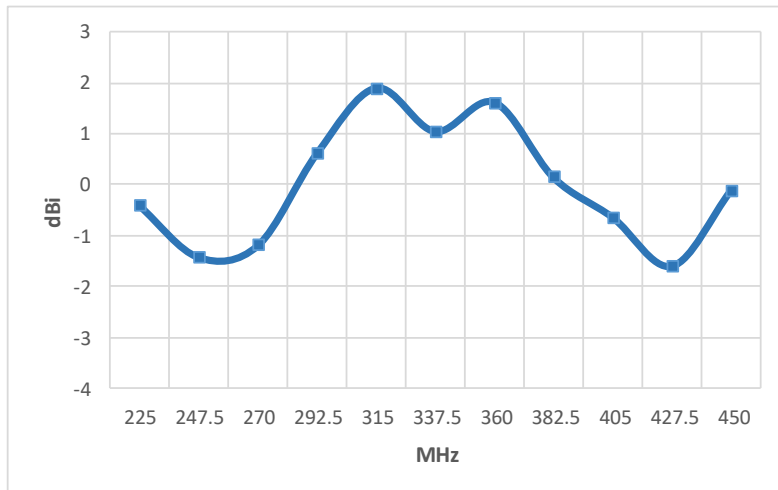
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|--------------------------|---|
| Design | VHF: End feed monopole. UHF: Dipole. L-Band dipole elements. Radiating elements completely enclosed in epoxy/fibreglass laminate. Metal parts are brass, aluminium and stainless steel. |
| Length | 1.64 m |
| Weight | Whip: 1.2 kg Base: 2.7 kg |
| Wind Rating | 55m/s (201 km/h) |
| Finish | Polyurethane lacquer |
| Temperature Range | - 55°C to + 71°C |



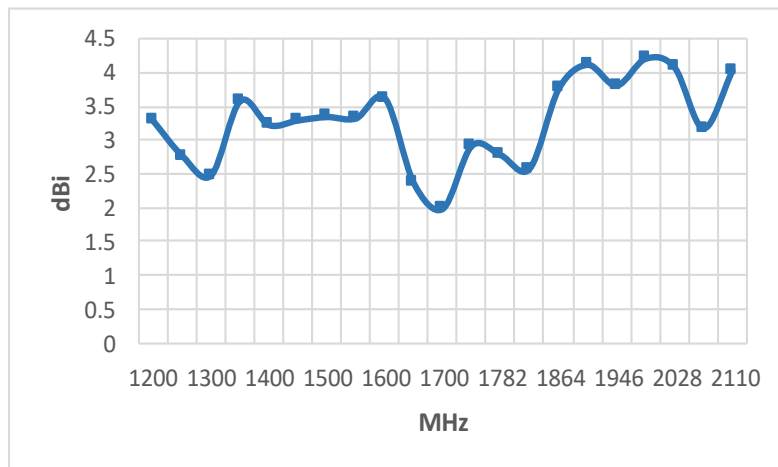
Gain Curves



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

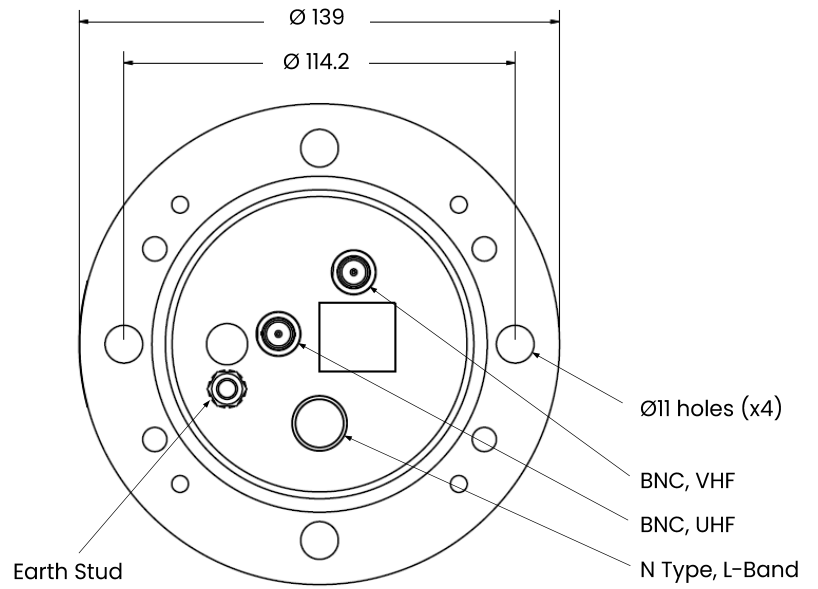
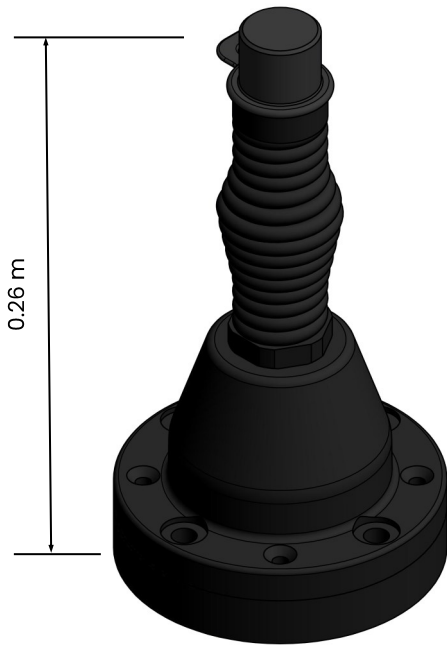


UHF Gain, dBi

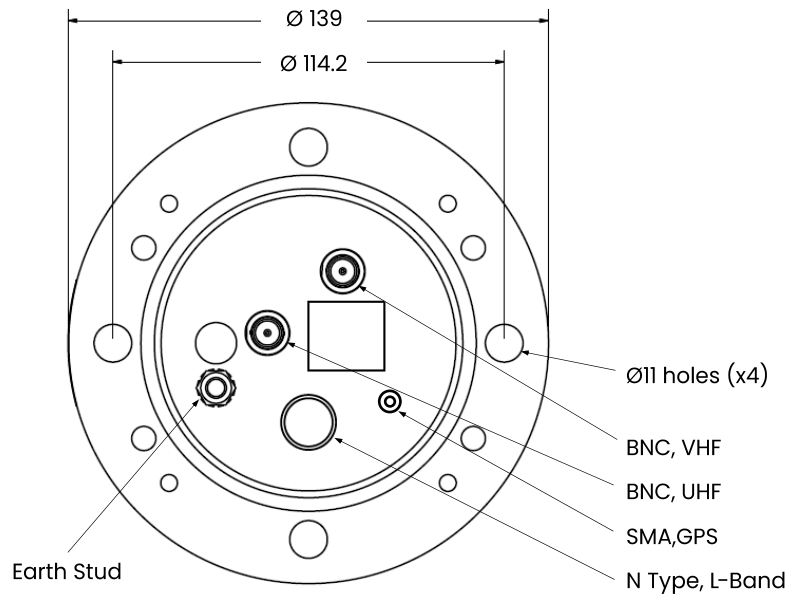
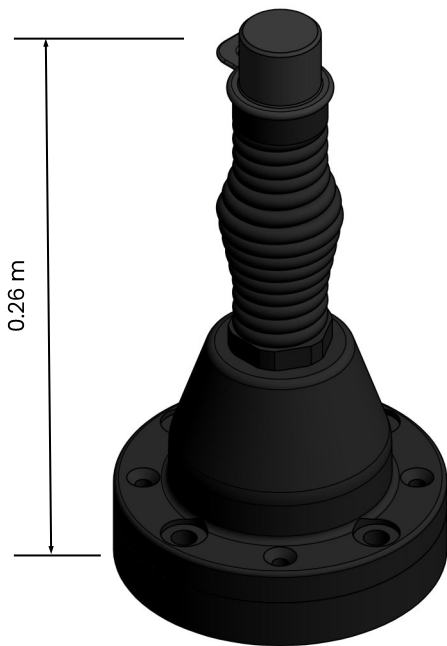


L-Band Gain, dBi

Nato 4-Hole Base



Nato 4-Hole GPS Base (option)



GPS Electrical Specifications

| | L1 GPS | L2 GPS |
|----------------|---------------------------------|---------------------------------|
| Frequency Band | 1575.42 ± 10 MHz | 1227.60 ± 10 MHz |
| Power Supply | 2.7-5.5 V @ <60 mA, + centre | 2.7-5.5 V @ <60 mA, + 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 |

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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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