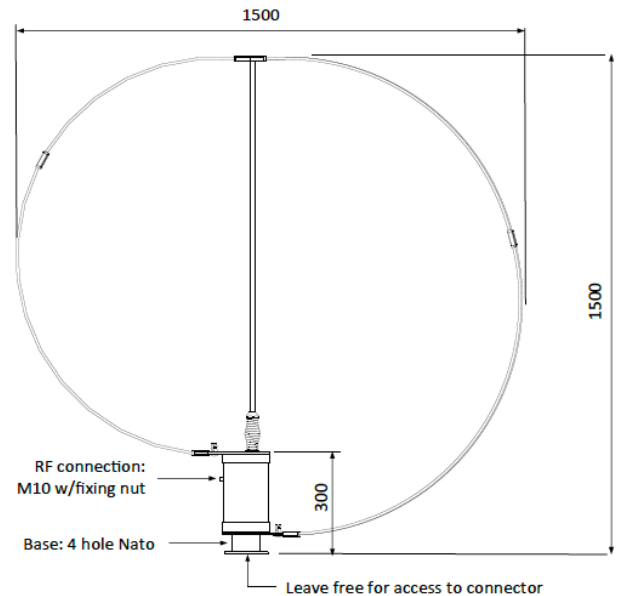


# On the Move Vehicle HF Loop Antenna

The **TSE-ANT-VEHHF-OTM** is a compact HF antenna for on-the-move vehicular platforms from 2 to 30 MHz. It is designed to provide superior Near Vertical Incident Skywave (NVIS) performance at distances from 0 to 500 km and allows continuous communications in ground-wave, NVIS and skywave applications. The On the Move Vehicle HF Antenna is a direct replacement for existing whip antennas and uses the same NATO base support. The replacement of the whip by the On the Move Vehicle HF Antenna takes just a few minutes and requires no special installation equipment nor changes to the structure of the vehicle.

This compact antenna is recommended for multiple antenna platforms, both because of its small size and because it reduces co-site interference with all V/UHF whip antennas. The On the Move Vehicle HF Antenna has been designed to give superior reliability and easier installation at a far lower cost compared to other HF NVIS antennas.



**Note-** Antenna can be configured for use with most HF tuners on the market. The standard model is set for use with either the Harris model 5383 or model 5382. Customer must inform TSE prior to purchase in order to calculate custom tuner setup lead times.

## Part #: TSE-ANT-VEHHF-OTM

Tactical Support Equipment Inc.  
4039 Barefoot Road  
Fayetteville, NC 28306  
[www.tserecon.com](http://www.tserecon.com)

For More Information  
Contact [sales@tserecon.com](mailto:sales@tserecon.com)

Phone: 800.889.4030  
Phone: 910.425.3360  
Fax: 910.425.3361

**Specifications (TSE-ANT-VEHHF-OTM):****Electrical**

|                          |   |
|--------------------------|---|
| <b>Frequency</b>         | 2-30 MHz  |
| <b>Gain</b>              | -15dBi @ 3.5MHz, -8dBi @ 10MHz  |
| <b>Impedance</b>         | 1 to 1000 ohm, 50 ohm nominal   |
| <b>Radiation Pattern</b> | See diagram overleaf  |
| <b>Power Rating</b>      | 200 Watts PEP and Average   |
| <b>Power Supply</b>      | 18-32 VDC, normally supplied from Power Amplifier   |
| <b>Connector</b>         | 10mm stud for RF<br>MIL-C-5015, 7pin for interface to ATU and supply voltage  |
| <b>Interface</b>         | The antenna has two digital inputs and one output, and a RS485 serial port. Software is then configured depending on radio system |

**Mechanical**

|                      |   |                  |
|----------------------|---|------------------|
| <b>Design</b>        | Copper braided fiberglass collapsible radiating loop. Feed tower made from aluminum and fiberglass. |                  |
| <b>Size</b>          | Tower: 25 x 15cm (H x Diameter), Radiating loop: 150cm diameter                                     |                  |
| <b>Weight</b>        | 15.43 lbs. (7 kg)   |                  |
| <b>Wind Rating</b>   | 55 m/s = 125 mph  |                  |
| <b>Finish</b>        | Polyurethane lacquer, normally black. Radiating element covered with black heat shrink tube         |                  |
| <b>Environmental</b> | Test method   | Per MIL-STD-810F |
|                      | Shock & Vibration   | Ground tactical  |
|                      | Water resistance  | IP67             |
|                      | Temperature range   | -40° to +71°C    |
| <b>Installation</b>  | Standard 4 hole NATO Base   |                  |

**Tactical Support Equipment Inc.**  
**4039 Barefoot Road**  
**Fayetteville, NC 28306**  
[www.tserecon.com](http://www.tserecon.com)

For More Information  
 Contact [sales@tserecon.com](mailto:sales@tserecon.com)

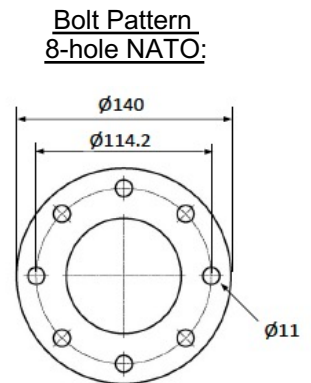
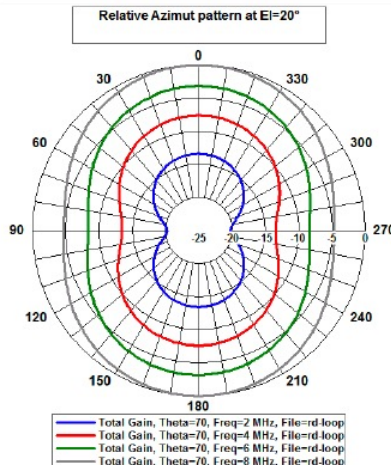
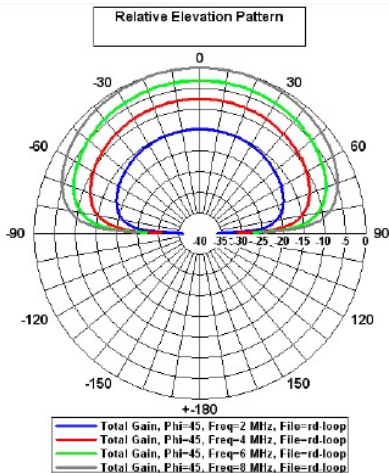
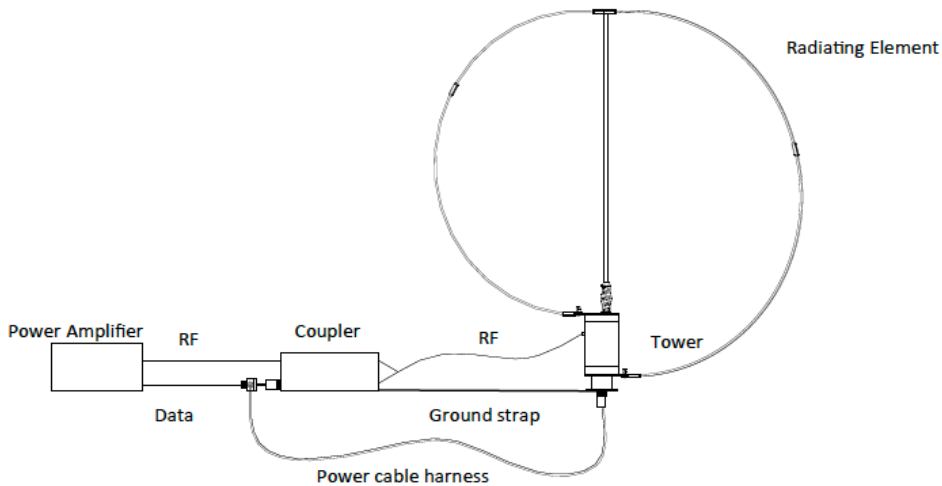
**Phone: 800.889.4030**  
**Phone: 910.425.3360**  
**Fax: 910.425.3361**

# Specifications (TSE-ANT-VEHHF-OTM):

## Interface Description:

The antenna interfaces directly to the coupler of many popular HF radios. Frequency information is obtained using an internal frequency counter or received in digital format through an RS485 line. The antenna is fully compatible with Fixed Frequency, MIL-STD-188-141A ALE and 3G ALE/data modes. The antenna works with systems up to 200Watts.

The On the Move Vehicle HF Antenna is lightweight and has a low physical profile that helps reduce vehicle antenna placement problems and has been designed for severe military environmental conditions. The antenna includes an easily assembled fibre-glass loop radiating element, a support rod with spring which gives mechanical support, a low-profile tower unit which adapts the impedance for high efficiency tuning by the coupler, an interface cable, an RF cable and a ground strap. The existing whip can be stored in the vehicle as an emergency back-up.



**Tactical Support Equipment Inc.**  
4039 Barefoot Road  
Fayetteville, NC 28306  
[www.tserecon.com](http://www.tserecon.com)

For More Information  
Contact [sales@tserecon.com](mailto:sales@tserecon.com)

Phone: 800.889.4030  
Phone: 910.425.3360  
Fax: 910.425.3361