Troll’s MT Series tactical tracking antennas maximize the range and reliability of air-to-ground video and data for manned and unmanned air, ground and marine vehicles. MT antennas are soldier friendly, and easy to operate, automatically locating RF signals and tracking them effortlessly. The system features an extremely accurate high-gain antenna that provides exceptional long-range performance which was recently demonstrated tracking a jet aircraft flying at 27,000 feet to a range of more than 260 mi / 420 km.

The modular design of the MT makes it easy to deploy, requiring no tools for setup or tear down. Troll’s MT Series mobile antennas automate tracking using a variety of methodologies, including telemetry, RF and spectrum tracking. The system locates airborne or ground transmission assets and maintains radio frequency links with them using one or more of these tracking methods.

MT series antennas are designed to automatically locate and track virtually any tactical or commercial radio waveform; CDLs, TCDL, DVB-T COFDM, OFDM or MIMO. Bidirectional encoding, decoding encryption and distribution can be controlled via local or remote control and generally connects to the network over secure Ethernet. WiFi and LTE modems can also be included to provide encrypted broadband connectivity.

Dual-GPS and Embedded INS
The MT-300 utilizes a high performance INS that incorporates the latest solid-state sensor technology, combining three-axis accelerometers, gyros, magnetometers, a barometric pressure sensor, two GNSS (Global Navigation Satellite System) receivers, and a low-power micro-processor. In static and dynamic situations the INS relies on multiple sensor types and DGPS to determine its location and orientation in three-dimensions. Self-optimizing and extraordinarily accurate, MT antennas continuously establish the orientation of the antenna automatically. Any errors caused by the mechanical gear train or mechanical flexure are normalized out of the feedback loop during tracking.

The MT supports multiple bands, UHF, L, S, C, X and Ku, and are available in single, to quad-band configurations. The antenna is radio-agnostic and will track any analog or digital waveform. The antenna will receive and transmit energy in narrow beams, improving signal integrity while minimizing the influence of interference or jamming signals.

MT-300 Tactical Tracking Antenna
UHF to Ku
Auto-Acquisition and RF Tracking
Available in Single to Quad-Band Configurations

Tested to over 420km
Auto-acquisition feature
Single to quad-band configurations
Heavy-duty continuous rotating, pan and tilt
Built-in INS/DGPS allows for auto-calibration
Power 110 to 240 VAC
Supports RF, telemetry and spectrum tracking
Intuitive touchscreen GUI controller
KLV601/ROVER/NEMA data
Built to MIL-STD-810
ITAR free
MT-300

Specifications subject to change without notice.

MT300 Tactical Tracking Antenna

**Frequency**

<table>
<thead>
<tr>
<th>Frequency</th>
<th>UHF Optional</th>
<th>L1 Band</th>
<th>L2 Band</th>
<th>S Band</th>
<th>C Band</th>
<th>Ku Band</th>
</tr>
</thead>
<tbody>
<tr>
<td>3300 - 900 MHz</td>
<td>0.9 GHz - 1.35 GHz</td>
<td>1.7 - 1.9 GHz</td>
<td>2.0 - 2.5 GHz</td>
<td>4.4 - 5.9 GHz</td>
<td>14 - 15 GHz</td>
<td></td>
</tr>
</tbody>
</table>

**Gain (mid-band)**

<table>
<thead>
<tr>
<th></th>
<th>13 dBi</th>
<th>13 dBi</th>
<th>21.0 dBi</th>
<th>24.0 dBi</th>
<th>30.0 dBi</th>
<th>36.0 dBi</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPBW (EL)°</td>
<td>± 18°</td>
<td>± 18°</td>
<td>± 8°</td>
<td>± 6.5°</td>
<td>± 2.9°</td>
<td>± 0.79°</td>
</tr>
<tr>
<td>HPBW (AZ)°</td>
<td>± 11°</td>
<td>± 11°</td>
<td>± 4°</td>
<td>± 3.5°</td>
<td>± 1.8°</td>
<td>± 0.57°</td>
</tr>
</tbody>
</table>

**Polarization**

|          | Vertical | Vertical | Vertical | Vertical | Vertical | RHCP |

MT Series Antennas feature a modular design that enables rapid deployment. They include a heavy duty, continuous rotation pan & tilt motor with -15° to +60° elevation. All electronics are housed onboard, including the radio/modem. Once power and Ethernet are connected the system auto-calibrates using its onboard INS/DGPS. MT Series antennas disassemble into three pieces without tools and comes with form-fitted cases for easy transportation.

- Low transportation costs
- Easy setup
- Automatic calibration and tracking
- Operate at long distances
- Network managed
- Minimize operator workload
- Daylight readable GUI controller