The SPARTE 300 series antenna is a field and time proven product delivered to customers for mission-critical applications where the telemetry reception is at stake. This robust antenna ensures to our customers highly accurate operations, as well as a long lifetime and simple maintenance tasks.

The SPARTE 300 series empowers users with a variety of applications, such as aircraft tracking, very high speed targets with high dynamics, or duplex datalinks with an Rx/Tx system. Additionally, the numerous and customizable I/Os provide users with the ability to operate the antenna in a multi-site tracking fashion, with master-slave communications between smaller and larger models.
**SYSTEM SPECIFICATIONS**

**Pedestal**
Azimuth Travel Range ............................................................ Unlimited
Elevation Travel Range ...................................−5° / + 105° option −15° / + 195°
Angular Velocity ..............................................................≤ 30 °/s on Each Axis
Angular Acceleration ......................................................≥ 40 °/s² on Each Axis

**Reflector**
Aluminum Alloy Reflector / Any Kind of Payload

**Servo-Control**
Static Pointing Accuracy .................................................. ≤ 0.2° rms
Tracking Accuracy .............................................................. ≤ 0.1° rms
Acceleration Lag ................................................................. 0.2°/°/s²

**Antenna Control Unit**
Manual, Slew, Scan, Slave (2 x Inputs), RF Tracking, Program-Track, GPS Slaving
Advanced Features: Autotracking (Automatic ACU Modes Management), Auto Acquisition (with Adjustable Signal Thresholds), Multipath Clipping, Centered Remote Control for Receivers, Recorders, ...
Tracking Signal Inputs .................................................... 4x Pairs of AM+AGC
Auto-Diversity ............................................................. LHCP/RHCP, Best Telemetry Channel
Diagnostic Tool .......................................................... Continuous BIT, Servo-Control, Tracking, Y-Factor, Logbook, Parameters Recording

**General Characteristics**
Power Standard ............................................................. 110 - 230 Vac 50-60Hz
Power Consumption .......................................................... 2.5 kVA Peak and 4 kVA with Max Wind Load
Antenna Weight ............................................................... 550 kg (1212 lbs)

**ENVIRONMENTAL SPECIFICATIONS**

**Operating Temperature Range**
Outdoor Equipment ..................................................... −25 to +55°C / +13 to +122°F

**Operational Wind in 2.4 m**
Mean ................................................................. Up to 80 km/h
Gust ................................................................. Up to 100 km/h
Survival Wind .......................................................... Up to 200 km/h

**Humidity**
Outdoor ................................................................. 95%
Indoor .............................................................. 85% Non-Condensing

**OPTIONAL ITEMS**
- Operator control desk
- Cable wrap (≤360°)
- Video camera for visual target aiming
- SCM feed up to 1000Hz tracking rate
- Acquisition aid and omni antennas
- 3rd channel and embedded test dipole
- Low gain switching for short range
- Single / Dual / Tri-band feed
- 6ft, 8ft, 10ft reflectors available
- Shipborne version (Inertia Measurement Unit and -15° lower El limit)
- Trailer-mounted version
- GPS time / position / heading synchronization (single or differential)
- IR tracking capability
- Custom form factors available on demand

<table>
<thead>
<tr>
<th>1.8 M / 6 FT</th>
<th>2.4 M / 8 FT</th>
<th>3.0 M / 10 FT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tracking</td>
<td>8 Dipoles Monopulse</td>
<td></td>
</tr>
<tr>
<td>Receive Frequency Range</td>
<td>1429 - 1545 MHz / 2200 - 2400 MHz / 4400 - 5250 MHz</td>
<td></td>
</tr>
<tr>
<td>Receive Polarization</td>
<td>RHCP and LHCP</td>
<td></td>
</tr>
<tr>
<td>Axial Ratio</td>
<td>≤ 1.5 dB on Axis</td>
<td></td>
</tr>
<tr>
<td>-3dB Beamwidth @ 2.3GHz</td>
<td>5°</td>
<td>3.8°</td>
</tr>
<tr>
<td>G/T @2300 MHz, No Filter, 10° Elevation, 20°C Clear Sky</td>
<td>6.3 dB/K</td>
<td>8.8 dB/K</td>
</tr>
<tr>
<td>Maximum Wind for Nominal / Degraded Performance</td>
<td>100 / 120 km/h</td>
<td>80 / 100 km/h</td>
</tr>
</tbody>
</table>