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° / +185° 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**: ≤ 0.05°
- **Tracking Accuracy**: ≤ 0.2°
- **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, Centralized 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)

**OPTIONAL ITEMS**
- Operator control desk
- Cable wrap (≥360°)
- Axial 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 and 10ft reflectors available
- Shipborne version (Inertia Measurement Unit and -15° lower El limit)
- Trailer-mounted version
- GPS time / position synchronization (single or differential)
- IR tracking capability
- Custom form factors available on demand

**ENVIRONMENTAL SPECIFICATIONS**

**Operating Temperature Range**
- Outdoor Equipment: –25 to +50°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

**SYSTEM SPECIFICATIONS**

<table>
<thead>
<tr>
<th>1.8 M / 6 FT</th>
<th>2.4 M / 8 FT</th>
<th>2.0 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>

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