SPARTE 500 series antenna, commonly mounted with a 5.5m reflector, is a field and time proven product delivered to customers for mission-critical applications where the telemetry reception is at stake.

Wherever telemetry tracking and reception matters, Safran Data Systems SPARTE 500 series antennas make the difference: high performance, in-the-field upgrade-ability to C-band support, skid or trailer-mounted mobility, and even 3-axis shipborne versions.

Widely used across world test ranges, the SPARTE 500 series antennas meet the most demanding flight test profiles. Its lean design and ease of operations make it a perfect match for any ground test range, as a complement to smaller range trackers.

**BEST-IN-CLASS SERVO CONTROLS**
Direct Drives, User Selectable Servo Algorithms

**SCM 1000HZ SCAN RATE**
Common SCM Design for Main & ACQ-AID Antenna

**C-BAND FIELD UPGRADE-ABLE**
Simple Add-On without any Structural Change

**TIME PROVEN**
Robust Pedestal in Operations at Test Sites for Decades

**TRANSPORTABLE ADAPTATION KIT**
Skid- or Trailer-Mounted Versions
> SYSTEM SPECIFICATIONS

### Pedestal
- Azimuth Travel Range: Unlimited
- Elevation Travel Range: -5° / + 91°
- Angular Velocity: 20°/s
- Angular Acceleration: 20°/s²
- Motors: Single Drive DC Brushless

### Reflector
- 8 Panel Segmented Auto-Aligned Carbon Fiber

### Servo-Control
- Pointing Accuracy: ≤ 0.1°
- Tracking Accuracy: ≤ 0.1°
- Acceleration Lag: 0.07°/°/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, Phase & Slope Auto Calibration, ...
- Tracking Signal Inputs: Ax 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: 230 or 400 Vac 50-60Hz. 6.8kVA
- Antenna Weight: 2600 kg (5700 lbs)

### ENVIRONMENTAL SPECIFICATIONS

#### Operating Temperature Range
- Outdoor Equipment: -4°F to 122°F (-20°C to +50°C)
- Indoor Equipment: +5°F to +95°F (+10°C to +35°C)

#### Operational Wind
- Mean: ≤ 85 km/h
- Gust: ≤ 100 km/h
- Survival Wind: ≤ 200 km/h

#### Humidity
- Outdoor: 100 %
- Indoor: 85 % Non-Condensing

### OPTIONAL ITEMS
- INET
- Operator control desk
- Axial video camera for visual target aiming
- Reflector and feed de-icing system
- Cable wrap for special application (+/- 370°)
- Acquisition aid antenna
- Low gain switching for short range
- Single / Dual / Tri-band feed
- INET
- RF Tracking, Program-Track, RF Tracking, GPS Slaving

### SYSTEM SPECIFICATIONS

#### Tracking
- 8 Dipoles Monopulse

#### Receive Frequency Range
- 1429 - 1545 MHz / 2200 - 2400 MHz / 4400 - 5250 MHz

#### Receive Polarization
- RHCP and LHCP

#### Axial Ratio
- ≤ 1.5 dB on Axis

#### -3dB Beamwidth @ 2.3GHz
- 2° / 1.6°

#### G/T @2300 MHz, No Filter, 10° Elevation, 20°C Clear Sky
- 14.5 dB/K / 16 dB/K

#### Maximum Wind for Nominal / Degraded Performance
- 100 / 120 km/h / 85 / 100 km/h