**DATA SYSTEMS** 



TRACK RECEIVE RECORD PROCESS

# **SPARTE 300** L/S/C

**Tracking Antennas** 6ft (1.8m), 8ft (2.4m) & 10ft (3m)



**TELEMETRY GROUND SOLUTIONS** 



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.



Launch Vehicle Telemetry



Missile Testing



Fixed & **Rotary Wing** 

**BEST-IN-CLASS SERVO CONTROLS** 

Direct Drives, User Selectable, Servo Algorithms HASSLE-FREE MAINTENANCE

Easily Accessible Electronics & Mechanics Above Az

C-BAND FIELD UPGRADEABLE

Simple Add-On without any Structural Change

SCM 1000 HZ SCAN RATE

Common Design for Main Feed & ACQ-AID Feed SHIPBORNE READY

IMU Add-On for Shipborne Operations



# SATELLITE TRACKING SOLUTIONS

# SPARTE 300 L/S/C

### > 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	≤ 0.2° 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, Centralized Remote Control for Receivers, Recorders, ...

#### **General Characteristics**

Power Standard	110 - 230 Vac 50-60Hz
Power Consumption 2.5 kVA Peak an	d 4 kVA with Max Wind Load
Antenna Weight	550 kg (1212 lbs)

# > ENVIRONMENTAL SPECIFICATIONS

#### **Operating Temperature Range**

#### **Operational Wind in 2.4 m**

Mean	Up to 80 km/h
Gust	Up to 100 km/h
Survival Wind	

#### **Humidity**

Outdoor	95%
Indoor 85% Non-C	ondensing

# **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
- ► 3<sup>rd</sup> channel and embeded 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

	1.8 M / 6 FT	2.4 M / 8 FT	3.0 M / 10 FT
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	5°	3.8°	2.9°
G/T @2300 MHz, No Filter, 10° Elevation, 20°C Clear Sky	6.3 dB/K	8.8 dB/K	10.7 dB/K
Maximum Wind for Nominal / Degraded Performance	100 / 120 km/h	80 / 100 km/h	50 / 75 km/h







#### **GLOBAL SALES**

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**SAFRAN**