

DATA SYSTEMS



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, having all the antennas irrespective of their size, monitored and controlled using **TM Maestro**



Launch Vehicle Telemetry



Missile Testing



Fixed & Rotary Wing

BEST-IN-CLASS SERVO CONTROLS

User Selectable Servo Controls

HASSLE-FREE MAINTENANCE

Easily Accessible Electronics & Mechanics Above Az

MODULAR L, S OR C BAND

Simple Add-On upgrade 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

TELEMETRY GROUND 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
 (30°/s² with 3m dish)

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, ...
 Tracking Signal Inputs 4x Pairs of AM+AGC
 & Tracking over IP
 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 600 to 900 kg (1320 to 1980 lbs)
 depending on configuration

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature Range

Outdoor Equipment -20 to +55°C / -4 to +131°F
 extended range on request
 Indoor Equipment +10 to +35°C / +50 to +95°F

Humidity

Outdoor 100%
 Indoor 85% Non-Condensing

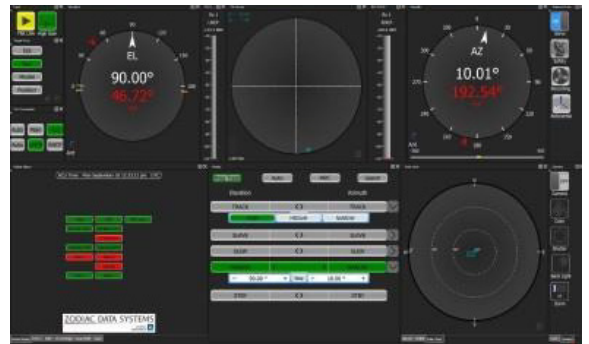
OPTIONAL ITEMS

- ▶ Operator control desk
- ▶ Video camera for visual target aiming
- ▶ Single/Dual/Tri-band feed
- ▶ 1.80m/2.40m/3.00m reflector
- ▶ SCM feed up to 1000 Hz tracking rate
- ▶ Acquisition aid feed
- ▶ Low gain switching for short range
- ▶ Trailer mounted version
- ▶ GPS time / position / heading synchronization (single or differential)
- ▶ Shipborne version with Inertia Measurement Unit (IMU) and -15° lower El limit
- ▶ Range control with TM Maestro
- ▶ Extended temperature range

OPTIONS ON REQUEST

- ▶ Long loop test capability with 3 channel rotary joint
- ▶ IR Tracking
- ▶ Container or other form factor on request
- ▶ De-icing of the reflector
- ▶ Improved G/T
- ▶ Radome environment protection

	1.8 M / 6 FT	2.4 M / 8 FT	3.0 M / 10 FT
Tracking	8 Dipoles Monopulse		
Receive Frequency Range	1435 - 1545 MHz / 1790 - 1850 MHz / 2200 - 2400 MHz / 4400 - 5250 MHz		
Receive Polarization	RHCP and LHCP		
3dB Beamwidth @ 2.3GHz	5°	3.8°	3.0°
G/T @2300 MHz, No Filter, 25° Elevation, 20°C Clear Sky	6.5 dB/K	9 dB/K	11 dB/K
Maximum Wind for Nominal / Degraded Performance / Survival	100 / 120 / 200 km/h	80 / 100 / 200 km/h	50 / 75 / 200 km/h



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