TRACK RECEIVE RECORD PROCESS

Sparte 300 L/S/C

TRACKING ANTENNAS

6FT (1.8M), 8FT (2.4M) & 10FT (3M)

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

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

HASSLE-FREE MAINTENANCE
Easily Accessible Electronics & Mechanics Above Az

SHIPBORNE READY
IMU Add-On for Shipborne Operations

C-BAND FIELD UPGRADEABLE
Simple Add-On without any Structural Change

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

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)

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

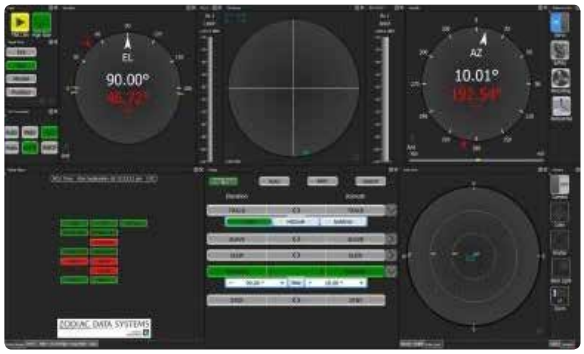
Humidity

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

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 embeded 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

	1.8 M / 6 FT	2.4 M / 8 FT	2.0 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 / 70 km/h



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