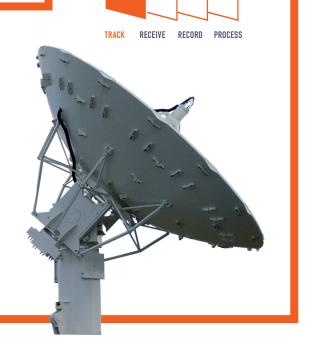
DATA SYSTEMS

SPARTE 700 L/S/C

Tracking Antennas 20ft (6.0m) / 24ft (7.3m)



TELEMETRY GROUND SOLUTIONS



The SPARTE 700 series antenna is a field and time proven product delivered to customers for **mission-critical applications** where the telemetry reception is at stake. Any flying target such as aircraft or space launching vehicles will be accurately tracked thanks to the high gain of this **large aperture antenna**.

The very robust and solid design of the SPARTE 700 series ensures the **best performance in any situation:** aluminumalloy reflector for increased surface accuracy, SCM tracking feeds for reliable and accurate tracking, dual drive for motors redundancy and no-backlash...

And for the ever most demanding applications, the SPARTE 700 series also exists in **skid-mounted and trailer transportable and gyro-stabilized versions.**



Launch Vehicle Telemetry



Missile Testing



Fixed & Rotary Wing

BEST-IN-CLASS SERVO CONTROLS User Selectable Servo

Controls

SCM 1000 HZ SCAN RATE

Common SCM Design for Main & ACQ-AID Feed

MODULAR L, S OR C BAND

Simple Add-On upgrade without any Structural Change

DUAL DRIVE

Uninterrupted Operations, No Backlash

TRANSPORTABLE VERSION

Relocatable skid mounted or trailer version



TELEMETRY GROUND SOLUTIONS

SPARTE 700 L/S/C

> SYSTEM SPECIFICATIONS

Pedestal

Azimuth Travel Range	± 360°
Elevation Travel Range	2.0° / + 92°
Angular Velocity	20°/s Az, 20°/s El
Angular Acceleration	20°/s²
Motors	2 Motors/Axis (Dual Drive)

Reflector

12 Panel Segmented Aluminum Alloy Reflector for fixed antennas 8 + 16 Panels composite for transportable antennas

Servo-Control

Pointing Accuracy	≤ 0.1° rms
Tracking Accuracy	≤ 0.05°
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 and 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	400 Vac 50-60Hz. 30kVA
Antenna Weight	11,000 kg (24,250 lbs)

> ENVIRONMENTAL SPECIFICATIONS

Operating Temperature Range

• •	20°C to +45°C (-4°F to 113°F) +10°C to +35°C (50°F 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
- ► 6.00m/7.30m reflector
- ► SCM feed up to 1000 Hz tracking rate
- ► Acquisition aid feed
- ► Low gain switching for short range
- ► Unlimited Azimuth
- ► Skid or Trailer mounted version-5 to 185°

- GPS time / position / heading synchronization (single or differential)
- ► Shipborne version with Inertia Measurement Unit (IMU)
- ► Extended Elevation travel range -5 to 185°
- ► Range control with TM Maestro
- ► Extended temperature range

> OPTIONS ON REQUEST

- ► Long loop test capability
- ► Improved G/T
- ► Radome environment protection

	6.0m / 20 FT	7.3m / 24 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	1,5°	1,24°
G/T @2300 MHz, No Filter, 25° Elevation, 20°C Clear Sky	17.3 dB/K	19 dB/K
Maximum Wind for Nominal / Degraded Performance / Survival (for fixed installations)	100 / 120 / 200 km/h	90 / 110 / 200 km/h







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