



LRTA LONG RANGE TRACKING ANTENNA SYSTEM

The LRTA enables complete long-range command and control within direct line of sight between the antenna and the aircraft. The directional antenna is mounted on a positioner which allows for automatic or manual tracking of an aircraft. An omnidirectional antenna provides redundancy and 360-degree coverage with reduced range capabilities.

Compatible with all current AeroVironment SUAS, the LRTA is designed to be operated as a command center ground control solution with options to provide either long-range remote video terminal (RVT) monitoring or full command-and-control operations. The maximum range of the LRTA is up to 60 km with practical usage based on various SUAS endurance capabilities.

DIFFERENTIATING SPECIFICATIONS

SYSTEM PERFORMANCE	M1/2/5	M3/4/6
OPERATING BANDS	M1/2/5	M3/4/6
ANTENNA BEAM WIDTH (3 dB)	M1/2/5: >9° horizontal, >9° vertical	M3/4/6: >6° horizontal, >7° vertical
LINK MARGIN @ 60 KM RANGE WITH FOS UAS	M1/2/5: 6 dB	M3/4/6: 7.2 dB

For M1/2/5 or M3/4/6 DDL™ Operating Bands

LRTA

DISTINCTIONS



»» LINK RANGE
Up to 60 km



»» PAN RANGE
360° continuous



»» OPERATING BANDS
M1/2/5 or M3/4/6

SPECIFICATIONS

SYSTEM PERFORMANCE

LINK RANGE, RVT MODE	60 km nominal range to DDL-equipped UAV
LINK RANGE, GCS MODE	60 km nominal range to DDL-equipped UAV
PAN RANGE	360° continuous
TILT RANGE	-20° to +90°
FIBER OPTIC LINK DISTANCE	Up to 2000 m (30 m cable supplied)

PHYSICAL

WEIGHT, DEPLOYED	M1/2/5: 304 lb (138 kg) M3/4/6: 300 lb (136 kg)	(Includes tracking antenna assembly, GCS, cables, battery. Does not include shipping container weight)
ANTENNA HEIGHT (C/L) ABOVE GROUND:	M1/2/5: 5.8–9.4 ft (1.8–2.9 m) M3/4/6: 5.25–8.8 ft (1.6–2.7 m)	
BASE DIAMETER	5.3 ft (1.6 m)	

POWER

TX POWER	Pass-through, depends on DDL module
RX SENSITIVITY	-93 dBm
POWER CONSUMPTION	275 W (nom., heater off) 460 W (max., heater on)
GCS POWER	120/240 V ac, 50–60 Hz
OPERATING VOLTAGE	90–250 V ac, 47–65 Hz



LRTA M1/2/5



LRTA M3/4/6

KEY FEATURES

- »» High-gain antenna for long-range UAV operations
- »» Omnidirectional antenna for short range operations
- »» Automatic switching between antenna range modes
- »» Automatic UAV tracking function (two-axis positioner)
- »» Available in AeroVironment™ DDL Military Operating Bands M1/2/5 or M3/4/6
- »» AC prime power with remote power enable
- »» Fiber optic link from antenna to remote Ground Control Station (GCS)
- »» Uninterruptable Power Supply (UPS)/Power conditioner for tracking antenna