

Mobile Tracking System (MTS)

# MTS 2.0 & RADOME



TSC's Mobile Tracking System (MTS) is a simple to use, turn-key solution that provides automatic tracking of nodes in a Mobile Ad hoc Network (MANET). The system is optimized to extend the range of air-to-ground links passing high definition video and any other IP based data. Ideal scenarios include UAVs, manned aircraft, vehicular and maritime applications.

With a compact form factor requiring little setup from an operator, the Mobile Tracking System simplifies an air-to-ground tactical IP network, even when both airborne and ground based nodes are in motion.

## RAPIDLY DEPLOYABLE, LOW MAINTENANCE.

- RF Tracking for GPS Denied Environments
  - Persistent Systems, Silvus, Aerovironment DDL
- Tracking options include: CoT, Protobuff, Mavlink, ADS-B, etc.
- Radome version for permanent installation in harsh environments
- Lightweight, small form factor
- Minimal mechanical setup required
- Automatic heading calculation
- Radio agnostic, modular design
- Integrated Inertial Navigation System (INS)
- Built in gimbal stabilization
- Web-based Graphical User Interface (GUI)
- Integration assistance & support available
- NDAA 848 Compliant

MADE IN  
  
U. S. A.



MTS 2.0

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## MTS 2.0 FEATURES

- **Minimal Physical Setup Required.** The MTS, paired with a radio package, is one complete unit that only requires power and a target node to track. Heading and location information of both the MTS and target node are automatically calculated and updated continuously. An integrated Inertial Navigation System provides heading information (Error <0.8°) and computations for continuous tracking.
- **Tracking System On-The-Move.** The MTS does not need to be static like most tracking systems. With the INS and Gimbal Stabilization, the MTS has the capability to be used in maritime and vehicular environments without RF degradation or attenuation during pitch and rolls.
- **Radio Agnostic, Modular Design.** Compatible with all major MANET radios currently on the market, the MTS integrates seamlessly into SISO and MIMO networks offering extended range in the smallest form factor possible. Radios swap in seconds with wiring harnesses available for major radio manufacturers.
- **Unparalleled Throughput At Distance.** By using Multiple Input Multiple Output (MIMO) technology on a dual polarized antenna, the MTS provides the additional Mbps needed to stream HD video feeds and other data through a MANET at 100+ miles in optimal conditions.

## FEEDS



### L/S-BAND FEED

L-BAND GAIN: 14 dBi  
S-BAND GAIN: 18 dBi  
FREQ: 1.37-2.5GHz



### S-BAND FEED

GAIN: 18 dBi  
FREQ: 2.2-2.5GHz



### S/C-BAND FEED

S-BAND GAIN: 18 dBi  
C-BAND GAIN: 22 dBi  
FREQ: 2.2-6GHz



### C-BAND FEED

GAIN: 25 dBi  
FREQ: 4.4-6GHz

## SPECIFICATIONS

PAN/TILT	Pan Tilt Speed	Pan Range	Continuous
		Pan Rate	(1 Hz) 39°/sec • (2 Hz) 58°/sec
		Tilt Rate	(1-2Hz) 19°/sec
		Tilt Range	0° - 90°
POWER	Top Gimbal Power Available	Input Power	12-36v
		Power Draw	Nominal draw: 80W • Maximum: 200W
			3 Amps at 28v
ENVIRONMENTAL	Water Resistant	Temperature	-20° to 65° C
		Environment	Ruggedized for Outdoor Use
		Submersible	No
		Impedance	50 Ω
ANTENNA (options available)		Polarization	Adjustable—Dual Polarized, Vertical & Horizontal or X-Polarized (+45° & -45°)
DIMENSIONS	MTS 2.0	L x W x H	23" x 18" x 24"
		Weight	30 lbs
	MTS 2.0 Radome	L x W x H	26" x 32" x 32"
		Weight	60 lbs
CASE	MTS 2.0	L x W x H	34" x 24" x 20" Checkable as luggage on a commercial flight
		Weight	70 lbs (including equipment) - Manageable by 1 person
	MTS 2.0 Radome		Options available
SETUP	Setup time		Under 1 minute