



## Mobile Multi-Spectral TSPI System (MMTS)

The system is optimized to automatically track and capture Time-Space -position-Information (TSPI) of the world's fastest hypervelocity missiles and projectiles. This system is used in tracking missiles and projectiles for recording TSPI data for engineering analysis of flight trajectories and documentary visual presentation of the mission. MMTS also includes an integrated motion analysis capability for 6DOF (six degrees of freedom) post mission image processing. With the addition of an integrated continuous wave Doppler radar, MMTS provides a single station solution for the capture of 3D data of the flight path of a projectile in real time.



### Features

Fully Integrated ARGUS Pedestal and Sensor Control Software • Real Time TSPI Data Output • Single Station Solution • Sensors and System Timing Synchronized to IRIG at 250 Hz • Dual-Gate Auto-Tracking with Camera Link at 250 Hz • Remote-Control Console • Digital Servo Amplifier

### Sensors/Optics

Mid-wave IR, High Speed, 250 FPS, Tracking Camera/ 64-inch f/4, Ritchey-Chrétien Lens • Long-wave IR High Speed, 250 FPS, Tracking Camera/ 64-inch f/4, Ritchey-Chrétien Lens • Visible, High Speed, 250 FPS, Tracking Camera/ 40-2200mm, f/3.5-11 / Metric Zoom Lens • Visible High Speed Camera - 6000 FPS/ 112.5-inch, f/9, Ritchey-Chrétien Lens

### Software – ARGUS Control Software

Integrated Sensor and Tracking Mount Control • Automatic Star Calibration and Turn-and-Dump Target Board Calibration • Simulation Mode • Diagnostics and Maintenance Functions • Remote Designation • TENA Compatible (Optional) • Integrated Post Mission Motion-Analysis Software (TrackEye)

### Radar

Continuous Wave Doppler Tracking/Range Radar • 80 Watts • Range 65 KM Maximum • Radial Velocity based on CW

Specifications:	
Nominal Payload	600 pounds
Maximum Payload	1000+ pounds with reduced accuracy and performance.
Standard Configuration:	On-Axis optical payload with no man-on-the-mount.
Optional Configuration:	On Axis Optics with Off Axis Radar.
Azimuth Torque:	1500 foot pounds
Elevation Torque:	2 x 300 foot pounds
Azimuth Acceleration:	100+ degrees/second <sup>2</sup> with nominal payload
Elevation Acceleration:	100+ degrees/second <sup>2</sup> with nominal payload.
Azimuth Velocity:	100+ degrees/second
Elevation Velocity:	100+ degrees/second
Weight:	6500 lb trailer mounted pedestal with single axle.
Dimensions:	123L x 85W x 80H inches (plus 21" trailer tongue)
Calibration:	No Radar: Turn & Dump, Star Calibration
Radar on Top:	Star Calibration only
Radar On Side:	Turn & Dump, Star Calibration
Encoder:	24 bit absolute position optical encoder with 23 bit quadrature output for velocity

For additional information contact:

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