

LOCUST Target Acquisition and Tracking System (TATS)





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LOCUST TATS offers ease of use, multi-spectral sensing, and unmatched targeting to cue threats to a wide range of tactical weapons including EO/IR missiles, expendable drones, high energy lasers, high power microwaves, electronic attack, and kinetic munitions. BlueHalo's flexible LOCUST TATS features field-proven tracking, sensing, and threat engagement logic that can be readily applied to different missions including counter-UAS (C-UAS), counter-missile, counter-rocket, artillery and mortar (C-RAM), intelligence, surveillance, and reconnaissance (ISR), and test and evaluation (T&E). LOCUST TATS provides higher performance situational awareness, data collection, test monitoring, and target tracking when compared to traditional pan/tilt gimbal solutions.

Features	Feature	Capability	Key Benefits
RF Cueing Sensor Interfaces and Overlays	SWaP	40.5" W X 49" D X 33.5" H Weight ~349 lbs. <750 Watts Power Consumption	 Modular Sidecar Payloads Easy to Service System Only Requires Ethernet Connection and Power
 Multi-Target IR Search and Track Modes 	Fine Track Payload	3x Zoom SWIR Camera 500-2500 Hz Frame Rates	- High Speed Tracking Maintains Lock on Evasive Threats - Zoom Optics Handle Variable Object Sizes
 High Bandwidth Tracking for Threat ID 			and Ranges - Optical Train Supports Designator/Dazzler Beams
 High Resolution 3-D Target Location 	Target Illuminator	Illuminator Spot Size Control Eye-Safe Laser	- Full 24/7 Imaging Using Active Laser Illumination - Superior Image Quality and Clutter Rejection
 Integration Support for Battle Management 	Visible Acquisition Sensor	20x Optical Zoom Lens 1280 x 720 HD Format, 120 Hz Color and Monochrome Near-IR Sensing	 Simultaneous Wide Field Daytime Tracking with Narrow Field SWIR Precision Tracking Stellar Calibration Support in GPS Denied Environments
Networks	MWIR Acquisition Sensor	20x Optical Zoom Lens 1280 x 720 HD Format, 120 Hz All-Digital Focal Plane Array	 Simultaneous Wide Field Thermal Tracking with Narrow Field SWIR Precision Tracking High Uniformity FPA for Enhanced Small Target Detection
	Laser Ranger	1.55 µm, Eye-Safe Laser Range Finder 1-25 Hz Measurement Rate	- Real-Time Focus Control for All Imaging Sensors - Target 3-D Time Space Position Information
	Gimbal	Travel: 360 Az, -30 to +90 El Agility: 100 Deg/s, 80 deg/s²	- Stabilized, Inertial Pointing - Time Optimal Slew to Cue Logic - Gimbal Search and Scan Modes
	Tracking	Unique Multi-Mode Algorithms Reconfigurable Hardware/Software	 Ultra Stable, Microradian-Class Tracking Jitter Specialized Detection and Tracking Algorithms Achieve Longer Detection Ranges and Multi-Target Swarm Handling
	Payload Interfaces	24V DC Power + Gig-E	- Simple, Straightforward Host Platform Integration - Laptop + Xbox Controller are Only External Equipment

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