

Product Catalogue

BSS
ADVANCE TECHNOLOGIES

TRIYAM-3D

DETECT | DECIDE | DESTROY

AI-DRIVEN AUTONOMOUS
LETHAL WEAPON SYSTEM

"Patent Pending"



AI-DRIVEN



TARGET DETECTION



TARGET TRACKING



TARGET AUTO ENGAGE



TARGET AUTO SHOOT



TRIYAM-3D

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SPECIFICATIONS

Fully capable of seamlessly supporting the deployment of various weapon systems, including the INSAS 5.56 mm LMG, IWI Negev LMGs (both 5.56 mm and 7.62 mm variants), all versions of 7.62 mm LMGs, as well as 7.62x51 mm Cal. MMGs that can be deployed with enhanced safety, precision, and tactical flexibility as and when desired for the following mode of operations with an accuracy of 95 % or higher :

Human-in-the-loop (HITL) target(s) manual tracking, acquisition & engagement

Human-on-the-loop (HOTL) auto-tracking, acquisition, & remote manual engagement.

Human-out-of-the-loop (HOOTL) auto tracking, acquisition & autonomous engagement.

Compatibility	INSAS 5.56 mm LMG, Negev LMG (5.56 mm and 7.62 mm), MMG chambered in 7.62x51 mm NATO
Unit Weight	Max 120 kg (excluding the weight of the Weapon, Ammunition, system battery, and optional solar charging panel)
Power Supply	Dual power operation—220 V/110 V AC supply or 48 V DC * 100 Ah or lower Ah lithium-ion rechargeable battery.
Environmental Durability	-30°C to +60°C, 95% humidity (non-condensing), dusty/sandy conditions, including very and extremely high altitudes. MIL Grade standard 180 G IP-65
Camera Module	4K UHD day/night automatic switch, 30x motorized optical zoom and 16x digital zoom with gyro stability. maximum resolution of 3840 x 2160 up to 30 FPS
Actuators	360° Vertical Control: -15° to Max +70 ° Rotational Speed: 360°/sec (both axis) 1/1400 (.0007 degree). Precision—equivalent to sub-0.0006866455 degrees accuracy.
Braking System	System integrated with armature-actuated brakes (AAB) with no wear and tear.
Laser Range Finder	Range: 1,200 m; Min range 10 m (±1m accuracy)
Response / Setup Time	≤ 30 ms. / Once weapon zeroing is complete, a trained operator can complete the full setup and calibration in ≤ 5 minutes.



TARGET DETECTION

Detect targets up to 800 m and 250m at night



SWARM CORDINATION

Deploy multiple units to work in coordination



TARGET TRACKING

Track multiple targets up to 800 m.



DRONE DETECTION

Detect and engage UAVs via passive optical sensing and scalable AI-driven triangulation



AUTO ENGAGE

Detect, track, and engage to shoot up to 800 m. effective range of 7.62x51 mm Cal.



MODULAR DESIGN

Man-portable, Quick DIY Construction

- Ballistic sensor-based jam detection with auto-pause and operator alert.
- When powered by 48V, 100Ah battery, system is capable of continuous operation autonomously or up to 96 hours under standard operating conditions.



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