Electromagnetic Net Capture UAV

The Electromagnetic Net Capture UAV, developed by NEXWISE integrates proprietary electromagnetic ejection technology with advanced AI systems to create a cutting-edge remote-controlled interception platform. This innovative drone combines aerial reconnaissance, security patrols, remote operation, intelligent net deployment, and threat detection capabilities into a unified system designed to effectively counter unauthorized drone activities - including low-altitude intrusions and rogue flights - through rapid net-based immobilization. With unique air-to-ground capability, it can also neutralize ground-based threats by deploying restraint nets from altitude, significantly enhancing security efficiency for both aerial and terrestrial scenarios.

The system is particularly suited for critical applications including airspace security, law enforcement operations, emergency response, and counter-drone missions. Its patented electromagnetic launch mechanism enables faster target interception compared to manual methods while maintaining non-destructive capture protocols.

Features & Specifications

- **Compliant with the GA510-2004 Police Capture Net industry standard.**
- **Core function: Deploys an expanding net for harmless target control;**
- **High safety: Reduces direct contact risks, ensuring safety for law enforcement and rescuers;**
- **Flexible and efficient: Quick response, precise targeting, and rapid net deployment enhance mission efficiency;**
- **Multi-functional: Supports various mission scenarios and cooperates with other equipment;**
- **Advanced technology: Incorporates intelligent obstacle avoidance and visual positioning for stable operation;**
- **Environmentally friendly: Low risk to surroundings and personnel, suitable for crowded areas.**

Technical Specifications

Section	Parameter Type	Details
Electromagnetic Net Capture Device	Product Form	UAV
	Projectile Type	Ultra-High Molecular Weight Polyethylene Net
	Number of Tethers	4
	Effective Capture Range	5-10 m
	Maximum Firing Count	>500 shots
	Shots per Charge	≥50 shots
	Mesh Size	≤200mm (diagonal length)
	Net Deployment Area	2.4×2.4 m
	Operating Temperature	-10℃ to 55℃
	Weight	Net Launcher: ~2kg
UAV	Operating Temperature Range	-10℃ to 50℃
	Functional Capabilities	▪ Electromagnetic Net Launch ▪ Aerial Reconnaissance； ▪ Security Patrol ▪ Remote Control； ▪ Visual Positioning ▪ Cooperative Engagement ▪ Intelligent Obstacle Avoidance ▪ Threat Identification & Early Warning

Application Scenarios

Drone Capture & Countermeasure System

Security Protection for Large-Scale Events

Emergency Incident Response