



AEROGUARD

A E R O G U A R D ' S D E F E N S E S Y S T E M S

THE NEW GENERATION OF DRONE DETECTORS AND ANTI-DRONE TECHNOLOGY



Introducing Aeroguard's Systems Unmatched UAV and Drone Defense

Aeroguard is a pioneering leader in air defense and counter-drone technologies, specializing in cutting-edge systems designed to detect, track, and neutralize unmanned aerial vehicles (UAVs) and drones with unmatched precision. By leveraging advanced radar, sensor fusion, and smart jamming capabilities, our solutions provide superior reaction times, extended operational ranges, and robust multi-layered protection against evolving aerial threats. With a focus on innovation and technological excellence, Aeroguard is setting new standards in defense, offering reliable and scalable systems to safeguard airspace in both military and civilian applications worldwide.

All of Aeroguard's advanced technologies are proudly developed and manufactured in Europe, ensuring the highest standards of quality, precision, and security. Our commitment to European innovation guarantees not only cutting-edge solutions but also the integrity and sovereignty of our products, meeting the strictest regulatory requirements and defense protocols. By keeping production and development within Europe, Aeroguard is strengthening the region's technological independence and contributing to the future of defense security on a global scale. With a deep focus on continuous improvement, our systems are designed to stay ahead of emerging threats, ensuring that our clients receive the most advanced and reliable counter-drone capabilities available.



ORACLE FIELD

Our advanced ORACLE FIELD Detection System, the portable version of our groundbreaking technology, sets a new standard for UAV and drone tracking, offering a highly flexible and mobile solution for airports, border control, militaries, and law enforcement agencies. With a detection range of up to 6km, ORACLE FIELD ensures that no unauthorized drone escapes detection, safeguarding critical infrastructure from potential threats. Equipped with the ability to detect a wide range of drone models, including DJI Phantom and Autel, the system utilizes proprietary software to provide exceptional performance. Supporting both Lightbridge 1 and 2 protocols, ORACLE FIELD delivers unparalleled accuracy and reliability in a compact and portable form, making it the ideal choice for dynamic and rapidly evolving security environments.



Key Features and Benefits:

- **Comprehensive Detection:** Accurately detects and tracks drones within an 8km range, including DJI Phantom and Autel models, using state-of-the-art technology.
- **Advanced Targeting and Tracking:** Equipped with innovative identification and targeting tools to quickly Detect potential drone threats.
- **Mobile and Flexible:** Lightweight and versatile, this system is perfect for rapid deployment and mobile operations.
- **Reliable Power:** Offers up to 8 hours of continuous operation, with any 12V battery, the ORACLE FIELD ensures dependable performance in the field.
- **Enhanced Security:** Essential for border security, airport protection, and critical infrastructure defense, the ORACLE Detection System is a vital tool in counter-UAV operations, ensuring rapid and reliable detection of unauthorized drones.
- **Low Maintenance and Cost-Effective:** Designed for long-term use with minimal upkeep, reducing operational expenses.
- **Integrated Mapping Solutions:** Features offline and online maps for real-time, low-latency tracking in areas with poor internet connectivity.



Applications for Ultimate Protection:

- **Border Safety:** Monitor and secure national borders with real-time drone detection and tracing to prevent illegal crossings and surveillance.
- **Wartime Protection:** Track UAVs and drones in conflict zones to maintain situational awareness and coordinate counter-attacks using multipurpose UAVs.
- **Airport Security:** Prevent unauthorized drone incursions into no-fly zones to ensure the safety of flights and travelers.
- **Police and Law Enforcement:** Enhance crime prevention and crowd control by tracking suspicious drones in urban areas.
- **With its integration of a 900MHz MAVLink communication system,** the Oracle Detection System ensures reliable, secure, and efficient tracking for any scenario. Upgrade your drone defense strategy with our unparalleled technology designed for safety, security, and operational excellence.

TECHNICAL SPECIFICATIONS

Frequency Range	300-6000Mhz Drone signals like 433Mhz, 800Mhz, 912Mhz, 1.4Ghz, 2.4Ghz, 5.2Ghz, 5.8Ghz Customized frequency as required
Radius Range of Detection	Up to 8km (In open air, line of sight)
Location Refresh time	2s
Location Accuracy	Within 3m
Device Size	350mmX215mmX80mm
Reciever Sensitivity	-115db (optimum value from the chip itself) -95db (value from field test)
Spatial Coverage (Azimuth/Elevation)	360 Degrees
Net Weight	Approx. 9kg
Quantity for simultaneous drone detection (Max no. of drones)	30
Routes Tracking	10
Battery Lasting Time	Approx. 8 hours
Antenna Type	High Gain Omni Directional Antennas
Operational Temperature	-40 to 60°C
Protection IP	IP67



ALPHA SMART JAMMER

SMART JAMMER

The escalating risk posed by rogue drones infiltrating restricted zones has spurred the creation of the Alpha smart Jammer, Aeroguard's cutting-edge anti-drone solution. Crafted from aerospace-grade carbon fiber, this system boasts a lightweight yet robust design, effortlessly portable within a sleek, compact trolley case.

Alpha smart Jammer represents the pinnacle of anti-drone technology, engineered to shield vital locations from unauthorized aerial intrusions. It neutralizes drones by jamming their communication and navigation systems, compelling them to either descend immediately or retreat to their point of origin. Equipped with sophisticated capabilities, Alpha smart Jammer can tackle multiple drones at once, delivering a dependable and swift defense for airspace security across military and civilian settings.

Harnessing powerful technology, the system disrupts prevalent drone frequencies such as 2.4 GHz, 5.8 GHz, and GPS, ensuring rapid and decisive neutralization. It is powered by a high-efficiency lithium iron phosphate battery for sustained performance, with the option to connect an external power source for prolonged operations. A user-friendly wired remote control enables effortless activation and deactivation, even in high-stakes scenarios.

Tailored for military and high-priority applications, Alpha smart Jammer combines exceptional reliability, portability, and resilience. Its state-of-the-art software and hardware provide quick adaptability and robust protection, making it the perfect choice for defending military installations, government facilities, and essential infrastructure.

ADVANTAGES AND FEATURES

Rapid Field Adjustments: Programmable for quick frequency changes and precise power output control.

Modular Design: Simplifies maintenance, repairs, and upgrades, ensuring operational readiness.

Multi-Band Jamming: Supports up to seven jamming modules simultaneously, covering up to 20 frequency bands.

Real-Time Monitoring: Each module features an LCD display for frequency, power output, and system status.

Versatile Power Options: Operates on external batteries, AC mains, or DC power for maximum flexibility.

Battery Level Indicator: Integrated display for real-time battery status monitoring.



The growing threat of unauthorized drones over sensitive areas has led to the development of the Alpha smart Jammer. Built with aerospace-grade carbon fiber, it is lightweight, highly durable and easy to transport in its compact trolley case.

The Alpha smart jammer is a state-of-the-art anti-drone jamming system created to safeguard critical areas from unauthorized drones. By disrupting the drone's communication and navigation signals, it forces the drone to either land or return to its operator. With its advanced technology, it can effectively target multiple drones simultaneously, offering a reliable and efficient solution for securing airspace in both military and civilian environments.

The system uses advanced technology to block common drone signals like 2.4 GHz, 5.8 GHz, and GPS, ensuring fast and effective drone neutralization. It features a high-performance lithium iron phosphate battery for long-lasting operation and an optional external battery for extended missions. A wired remote control panel allows simple ON/OFF operation, even under pressure.

Designed for military and critical use, the Alpha smart Jammer offers unmatched reliability, mobility, and durability. Its advanced software and hardware deliver rapid response and adaptive protection, making it ideal for securing military bases, government sites, and critical infrastructure.

TECHNICAL SPECIFICATIONS

Total RF power	Up to 400Watt
Jammer Module Number	7
Channel Frequency Number	Max: 20Bands
Jamming Source	Digital Signal Source Synthesize Technology, Adjust Frequency and Output Watt
Antenna Type	High Gain Omni-directional Antennas
Number of Antennas	7
External Battery	50AH\24-28VDC
Jammer Size	630*500*302mm
Net Weight	Approx. 15Kg



OMEGA SMART JAMMER

The Silent Disruptor

Introducing the Omega smart jammer, Aeroguard's portable anti-drone jammer. Designed for ease of use, the Omega smart jammer features an ergonomic, lightweight structure, allowing for quick deployment in any situation. Its versatile capabilities make it ideal for a wide range of security applications, including government compounds, military bases, anti-terrorism units, anti-drug units, border control agencies, and checkpoint personnel. The Omega smart jammer delivers a fast, reliable solution for neutralizing drone threats in critical areas.

As commercial and military drones, often equipped with high-resolution cameras, raise significant privacy and security concerns, they pose risks such as spying, drug smuggling, attacks, and unauthorized data collection. To protect personal space and prevent misuse, an effective method to block drone signals is essential.

The Omega smart jammer disrupts key drone communication links—remote control (R/C), GPS, and video—providing immediate protection against unauthorized drone activity, ensuring privacy and security in sensitive areas.

Designed for extreme weather conditions and extended use, the smart jammer gun backpack option is equipped with state-of-the-art Built in digital scope, liquid cooling and an external power supply. This highly adaptable setup is designed to seamlessly integrate with the ORACLE systems, forming a comprehensive solution. The 7-channel smart jammer features European designed and manufactured top-notch components, with both liquid and conventional cooling options. It offers a jamming range of up to 500 meters and is equipped with advanced antennas. Weighing approximately 8 kg, it includes a custom-made dedicated carbon fiber tripod. The system supports simultaneous jamming across multiple channels, and its rugged construction combines carbon fiber and Kevlar for enhanced edurance,durability and weight.



ADVANTAGES AND FEATURES

- Directional Jamming with built-in high gain directional antennae.
- Total RF output power is around 180watt, effective up to 500m.
- Stops all commercial drones, covering 0.9Ghz,2.4Ghz,5.8Ghz,5.2Ghz and 1.4Ghz signals. Flexible configuration can be customized as required.
- With internal rechargeable battery. Simple to be replaced.
- With a battery LCD display to indicate the battery status.
- Handheld. Easily to be carried.
- Configured to block 7 different frequency bands continuously or simultaneously.

TECHNICAL SPECIFICATIONS

Frequency Range	L1 and L2 400 Mhz 900 Mhz 2.4 Ghz 5.2 Ghz 5.8 Ghz
Radius Range of Protection	Up to 500m
Power Supply Voltage	22-28VDC
Jamming Bands	7 bands
Device Size	370mm*410mm*98mm
Total Band Output	180watt/band
Net Weight	Approx. 5kg
Routes Tracking	10
Antenna Type	High Gain Directional Antennae
Protection IP	IP67

ORACLE GUARDIAN

The ORACLE GUARDIAN is a comprehensive, integrated system designed for UAV detection and countermeasure operations. It can identify and track drones within a range of up to 7 kilometers, depending on environmental conditions, the device supports both automated and manual control modes. In unattended mode, it can autonomously detect drones in designated zones. It also features TCP/IP and 4G connectivity, enabling remote access to system status, control functions, and log reporting for streamlined mission management.

In an era where the skies are a growing battleground, the ORACLE GUARDIAN system is your decisive edge. Designed to protect critical assets and lives, it provides rapid, precise detection, tracking, of hostile drones—day or night, in any weather. With 360-degree coverage and real-time response, no threat goes unnoticed, and no drone escapes. Its advanced integration and autonomous capabilities ensure seamless operation, giving you control when seconds matter most. Dependable, effective, and built for the battlefield, this system is your unwavering shield against emerging aerial threats.

KEY FEATURES AND ADVANTAGES:

- **Early Alerting Capabilities:** Provides immediate alerts for UAV detection.
- **24/7 RF Detection:** Unattended monitoring with real-time drone detection, effective even in fog, night, and adverse weather conditions.
- **360-Degree Coverage Detection:** Ensures comprehensive area surveillance.
- **Detection Range:** Operates effectively within up to 7km in open air, subject to environmental conditions.
- **Expandable Drone Library:** Supports the addition of new drone data for future threats.
- **Drone Identification:** Detects drones with detailed parameters like detection time, drone type, azimuth, manufacturer model, frequency,
- **Spectrum Analysis and Waterfall Functionality:** Enables detailed frequency monitoring and interference detection.
- **Panoramic Scan:** Covers 300-6000 MHz spectrum to identify unknown UAVs and log them into the database.
- **Data Recording and Playback:** Captures IQ data for future analysis, evidence collection, and proof validation.
- **Integrated System:** Compatible with radar, optical cameras, and jamming systems.
- **Open Protocol Support:** Easily integrates with additional systems or equipment for enhanced operational capabilities.





The Oracle Guardian provides unmatched battlefield awareness and aerial threat detection, giving your team a critical edge. With 360-degree coverage and a detection range of up to 7 kilometers, it secures large operational areas day or night, even in harsh conditions. Its automated tracking and real-time identification eliminate delays, enabling fast, decisive responses to threats. Designed for rapid deployment and seamless integration with existing defense systems, the Oracle Guardian ensures your team is always ready to act. Reliable, precise, and built for modern combat, the Oracle Guardian is the essential solution for countering aerial threats and ensuring mission success.

TECHNICAL SPECIFICATIONS

Frequency Range	300-6000Mhz
RF Detection Signals	Drone signals, remote control signals; WIFI IEEE802.11a,b,n,g.
Detection Radius	Up to 6km in open air, still determined by the local environment.
Antennae	360-degree detection. 24 channels with three layers. Each layer is 8 units' circular array.
Antenna Type	Directional Spiral Antennae
Antennae Gain	-15-10dbi still determined by the frequency bands
Bandwidth in real time	120Mhz
Receiver Quantities	4 units
Receiver Noise	3-5dbi
Accuracy	Less than 3 rms (+/-3 degree) in open air or line of sight. Still determined by the environment.
Multi sites Location Accuracy	10%R
Drone detection time	less than 5s
Net Weight	19.5kg
Equipment Size	590mm (Diameter)*444mm (Height)
Power Supply	AC 220V 50Hz
Power Consumption	≤120watt
Operating Temperature	-35 to +55 degree
Storage Temperature	-20 to +70 degree
Humidity	Up to 85%, non-condensing
Communication Way	RJ45 interface communication, TCP/UDP Protocol.
Protection Grade	IP66
Geolocation Way	Single unit for direction finding, 2units at least for triangulation.
Quantity to be detected simultaneously	20 Units



ORACLE Flight C1/C2

The ORACLE FLIGHT C1/C2 is a cutting-edge drone detection system with an impressive range of 15 kilometers, marking a significant advancement in aerial surveillance and defense technology. This sophisticated system is designed to identify and track a diverse array of drone models, ensuring comprehensive coverage and security across various environments. The ORACLE Flight is available in two configurations, C1 and C2, tailored to specific mission requirements, allowing operators to select the most suitable setup based on the operational needs.

Beyond mere detection, the system offers the capability to control owned drones directly from a portable suitcase setup. This feature enables rapid deployment and an immediate response to neutralize potential threats posed by enemy drones, making it an invaluable tool for maintaining airspace integrity and safety in both civilian and military applications.

Additionally, the ORACLE Flight's user-friendly interface and portable design enhance its practicality, allowing operators to efficiently manage drone activity even in remote or high-pressure situations. Its advanced signal processing technology ensures precise identification of drone signatures, minimizing false alarms and enhancing situational awareness. This combination of mobility, accuracy, and versatility makes the system a cutting-edge solution for modern drone defense challenges, providing reliable protection against evolving aerial threats.



ADVANTAGES AND FEATURES

- 15-kilometer detection range for comprehensive drone surveillance.
- Broad compatibility with various drone models.
- Portable suitcase design for rapid deployment.
- Integrated drone control for owned units directly from the system.
- Enhanced airspace security in civilian and military settings.
- Quick threat neutralization capability.
- Easy to deploy and operate in any environment.
- Versatile application for both surveillance and defense operations.

TECHNICAL SPECIFICATIONS

Frequency Range	300-6000Mhz Drone signals like 433Mhz, 800Mhz, 912Mhz, 1.4Ghz,2.4Ghz, 5.2Ghz, 5.8Ghz Customized frequency as required
Radius Range of Detection	Up to 15km (In open air, line of sight)
Location Refresh time	2s
Location Accuracy	Within 3m
Device Size	650mmX500mmX240mm
Reciever Sensitivity	-115db (optimum value from the chip itself) -95db (value from field test)
Spatial Coverage (Azimuth/Elevation)	360 Degrees
Net Weight	Approx. 15kg
Quantity for simultaneous drone detection (Max no. of drones)	30
Routes Tracking	10
Battery Lasting Time	Approx. 8 hours
Antenna Type	High Gain Omni Directional Anntenae
Operational Temperature	-40 to 60°C
Protection IP	IP67



EAGLE EYE

The Eagle Eye is a versatile Unmanned Aerial System (UAS) built on a foundation of modular engineering. This is a highly robust platform designed to eliminate the logistical constraints of specialized, single-use drones.

Its core capability lies in its inherent adaptability, enabling operators to rapidly reconfigure the system's power and propulsion modules to match mission parameters precisely. From rapid-response surveillance to heavy-lift, long-endurance tasks, the Eagle Eye transitions fluidly. This ensures optimal performance across the operational spectrum, delivering reliable, high-precision results while maximizing asset utilization. The Eagle Eye is the singular UAS solution for complex, evolving aerial requirements.

Key Features and Benefits:



1. Modular Propulsion (Quad/Octo-rotor)

- Operational Benefit: Maximum Adaptability. Quickly switch between speed/efficiency and heavy-lift/stability.

2. Triple-Option Power (Battery, Hydrogen, Hybrid)

- Operational Benefit: Unmatched Endurance. Optimize for multi-hour flight time or instantaneous power delivery.

3. ADSB Transceiver

- Operational Benefit: Aviation-Grade Safety. Operate legally and safely in complex airspace; the drone can see and be seen.

4. RTK & GNSS Positioning

- Operational Benefit: Centimeter Accuracy. Guarantees precise data collection for mapping and forensic monitoring.

5. Hydrogen Power Cell

- Operational Benefit: Revolutionary Range. Enables persistent, long-linear inspections and minimizes mission downtime.

6. Single-Platform Design

- Operational Benefit: Superior Asset ROI. One system handles the tasks of multiple drones, reducing cost and complexity.



Applications for Ultimate Protection:

The Eagle Eye is engineered to deliver persistent, high-precision security in the most demanding operational environments. Its unique combination of endurance and advanced avionics makes it the definitive asset for protecting critical infrastructure and high-value operations.

Core Security Applications

- **Persistent Patrol & Surveillance:** The Hydrogen Cell power system enables multi-hour flight times, eliminating security gaps over vast infrastructure like pipelines, borders, and utility networks. It provides continuous, unblinking aerial watch.
- **Precision Anomaly Detection:** Leveraging RTK/GNSS centimeter accuracy, the Eagle Eye flies repeatable routes to detect minute changes, unauthorized intrusions, or security threats with verifiable data integrity.
- **Airspace Safety & Integration:** The built-in ADSB Transceiver ensures safe operation in complex or regulated airspace, providing collision avoidance and reliable identification alongside manned traffic.
- **Rapid Incident Response:** Offers immediate aerial intelligence to security teams responding to perimeter breaches, suspicious activity, or high-risk tactical scenarios, minimizing risk to personnel.

The Eagle Eye delivers mission reliability and persistent awareness where failure is not an option.

TECHNICAL SPECIFICATIONS

System	Specification	Operational Benefit
Positioning	RTK & GNSS (Multi-Constellation)	Centimeter-level accuracy (Horizontal: $\pm 1\text{ cm} + 1\text{ ppm}$). Essential for repeatable flight paths and high-precision photogrammetry.
Airspace Safety	ADSB Transceiver (IN/OUT)	Provides awareness of nearby manned aircraft, ensuring collision avoidance and compliance with growing global UAS traffic management.
Core Flight	Advanced Redundant Flight Controller	Ensures stable flight and reliable performance even under high-load conditions or partial system failure.
Range (Control)	63km (Standard LOS)	Ensures reliable command and control for extended-range missions, especially when leveraging hydrogen endurance.

Propulsion Layout	Configuration	Max Payload Capacity (Estimate)	Key Advantage
Standard	4 Motors / 4 Blades (Quadcopter)	11.0 kg	Maximum energy efficiency and flight speed. Highly maneuverable.
Heavy Lift	8 Coaxial Motors / 8 Blades (Octocopter)	24.0+ kg	Superior lift capacity for LiDAR/heavy gimbals. Higher stability and inherent motor redundancy.



The Eagle Eye defines operational flexibility by offering three specialized power plant versions on the same robust platform. Version One (Proprietary Battery) is optimized for high instantaneous power and rapid deployment, ideal for standard or short-duration missions. For unparalleled endurance, Version Two (Hydrogen Cell) provides revolutionary multi-hour flight times with near-instant refueling via tank swap, making it the definitive choice for persistent surveillance and long-linear inspections. Finally, Version Three (Hybrid) combines the extended range of Hydrogen with the battery's stability and burst power, creating a reliable, balanced system perfect for dynamic tasks like Search & Rescue or complex high-wind operations. This power adaptability ensures the Eagle Eye always matches its capability to your mission demands.

Metric	Version One: AG Battery	Version Two: Hydrogen Cell	Version Three: Hybrid (H ₂ + AG Battery)
Max Flight Time	45 Minutes	2.5 - 3.0+ Hours	Up to 3.5 Hours
Operational Advantage	High instantaneous power, fast deployment.	Extreme Endurance and zero emissions (water vapor). Ideal for long-linear missions.	Balanced Performance. Combines hydrogen range with battery burst power (take-off/wind).
Refuel/Recharge Time	60 - 90 minutes (Recharge) or 2 minutes battery swap	3 - Minutes (Hydrogen Tank Swap)	3 - 5 Minutes (H ₂ Tank Swap) + Battery Charge Time
Best-Suited Mission	Short-range inspection, high-power bursts (cinematography).	Persistent surveillance, border patrol, long-range pipeline/utility inspection.	Search & Rescue (SAR), dynamic cargo delivery, complex terrain mapping.

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THE FUTURE OF AIR DEFENSE