



ASISGUARD



ASISGUARD

About Us

ASISGUARD has high-end engineering capabilities through which the company has developed national and domestic critical solutions, some of which are the first in our country, with Electro-Optical Sight and Border Security Systems, Military Vehicle Electronics Systems, Rotary Wing Armed/Unarmed Drone Systems, Screen System solutions. All systems of ASISGUARD™ such as original hardware design, embedded software design, system engineering are performed by experts in their respective fields and delivered to the end user.

ASISGUARD, with the expertise to design and revise projects and solutions according to customer demands, and to keep the technologies and products it has developed up-to-date; the company has developed a cutting-edge specialization to design image stabilization, moving object tracking, object recognition and classification algorithms by using artificial intelligence and big data technologies.

ASISGUARD, Offering many domestic and national products in the field of defense to Türkiye, NATO and allied countries; constantly considers the needs and satisfaction of internal and external stakeholders, aims to develop its technological and engineering competence and to direct the technologies of the future.

Mission

To contribute to the strengthening of the Turkish Defense Industry with innovative technology and military solutions, to share the developed products and systems with allied countries.

Vision

To become a leading global brand by creating local and global solutions with high value-added critical technologies.

Our untiring soldiers and law-enforcement forces who put their lives at risk without a second thought have the utmost importance for us. Therefore, we take on the mantle of guardian angel for our army and law enforcement agencies via our domestically and nationally developed technology.

*Sınırların Ötesinde Teknoloji
Technology Beyond Borders*

SONGAR™

DRONE SYSTEMS

- SONGAR™ 5.56 X 45 MM Assault Rifle
- SONGAR™ 2 X 40 MM Grenade Launcher
- SONGAR™ 6 X 40 MM Drum Type Grenade Launcher
- SONGAR™ 3 X 81 MM Mortar Gripper
- SONGAR™ 8 X Tear / Smoke Grenade Launcher



SONGAR OPERATIONAL CONCEPTS



ATTACK

Coordinated Attacks

SONGAR can be used to coordinate attacks with other military assets, such as ground troops or other drones, to create a more comprehensive ambush strategy. This coordination can increase the likelihood of a successful outcome.

Force Multiplication

SONGAR can act as force multipliers by providing additional firepower and support to ground troops. This can enhance the overall effectiveness of an ambush, especially in asymmetric warfare scenarios.

Suprise and Stealth

SONGAR can be deployed stealthily, allowing forces to launch a surprise attack without revealing their location or presence. This element of surprise is crucial in an ambush, enabling a higher chance of success.

DEFENSE

Diversion and Distraction

SONGAR can create diversions or distractions to draw enemy attention away from the movement of friendly forces. This can help minimize the risk of detection.

Surveillance and Intelligence

Before launching an ambush, SONGAR can be used for reconnaissance and surveillance, providing real-time intelligence on enemy movements, positions, and activities. This information is crucial for planning a successful ambush.

Flexibility and Rapid Response

SONGAR offers flexibility in terms of deployment and can be rapidly redeployed to different locations as needed. This ability to adapt quickly is beneficial in ambush scenarios, where timing and mobility are critical.

Scenario: Neutralizing a High-Value Target in a Remote Location

Objective:

A military unit has identified a high-ranking enemy leader who frequently travels through a remote mountainous region to inspect operations and meet with field commanders. The objective is to ambush the leader's convoy without causing excessive collateral damage or risking troops on the ground.

Preparation and Planning

Intelligence Gathering:

SONGAR deployed to monitor the enemy leader's movements and identify his routine travel routes. Surveillance data indicates a narrow mountain pass where the convoy is most vulnerable.

Strategic Positioning:

SONGAR determine the optimal location for the ambush. They choose a point along the mountain pass where the terrain provides natural cover and limited escape routes for the enemy convoy.

Coordination with Ground Forces:

While the focus is on SONGAR, a small team of special forces operators is positioned at a safe distance to provide support if needed and to confirm the success of the ambush.

Execution

Triggering the Ambush:

On the operation time, SONGAR launched and positioned over the mountain pass. SONGAR operators wait for the target convoy to enter the designated kill zone.

Initial Strike:

When the convoy reaches the ambush point, SONGAR launch a coordinated attack. The drones target the lead and rear vehicles to block the convoy's escape routes.



Follow-Up Attacks:

Once the convoy is immobilized, SONGAR focus on key assets within the convoy, such as armed escorts or communication vehicles, to prevent retaliation or calls for reinforcements.

Diversions and Suppression:

To maintain control of the situation, additional SONGAR drops smoke bombs and engage any hostile forces attempting to counterattack or escape.

Extraction and Aftermath

Safety and Rapid Extraction:

With the convoy neutralized, the ground team verifies the status of the high-value target and retrieves any important intelligence. SONGAR provide overhead security to ensure a safe extraction.

Post-Operation Surveillance:

After the ambush, SONGAR continue to monitor the area for enemy reinforcements or other developments. This ongoing surveillance helps assess the impact of the operation and provides valuable intelligence for future missions.

Outcome

The ambush achieves its objective by eliminating the high-value target and disrupting enemy operations with minimal risk to friendly forces. SONGAR allows for a precision attack, reducing the need for large troop deployments and lowering the risk of casualties.

SONGAR™

SONGAR™

is a remotely-operated armed drone system, the **first** of its kind developed **indigenously** for the **Turkish Armed Forces'** inventory.

Designed for effective deployment across a wide range of military and security operations, SONGAR is capable of both day and night missions. It can operate within a 5 km radius and up to an altitude of 3000 meters mean sea level (MSL).

SONGAR is built with ergonomic and user-friendly features to minimize operator workload during critical tasks, such as executing return-to-home procedures in the event of a lost link, re-tasking mid-flight, and switching between autonomous and manual flight modes.

The SONGAR Ground Control Station is optimized for effective drone operation, featuring a compact, portable design suitable for tactical field use. During operations, real-time camera feed, flight telemetry, and mission mapping are displayed simultaneously and can be recorded

effortlessly. The Ground Control Station enables mission-critical functions, including starting and stopping recordings and reviewing previously captured data.

Currently fielded by the Turkish Armed Forces, SONGAR is operated by highly skilled military personnel.

GENERAL FEATURES

- National design
- Ground Control Station (GSC)
- Autonomous and manual flight modes
- Ability to operate at 3000 meters above sea level and 300 meters above ground level
- Simultaneous transfer of telemetry data and images
- Route planning on the map and autonomous flight
- Automatic return home feature in critical battery and connection loss situations
- Ability to perform missions at a standard 5 km range

SONGAR™

5.56 X 45 MM ASSAULT RIFLE



BEYOND
THE
BORDER

The **SONGAR** drone technology is **Turkey's first armed drone system** designed for assault purposes.

SONGAR is actively deployed within the inventories of the **Turkish Armed Forces** and the **General Directorate of Security**. The SONGAR armed drone technology is also operational in the inventory of several allied and partner nations.

FEATURES



National Design



Barrel rotation between +5 degrees and -45 degrees on elevation axis



Close air support capability for critical military installations



Ability to perform 35 minutes of duty without payload



Rapid response to known threats



Multi-layered firing safety measures until operator's authorization is received



Gimbaled Automatic Firing System (GOAS)



Compatibility with in-service 5.56 caliber 45 mm NATO standard firearms

TM

SONGAR



SONGAR™

2 x 40 MM GRENADE LAUNCHER



FEATURES



National Design



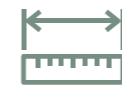
Close air support capability for critical military installations



Rapid response to known threats



Firing up to 2 grenades



400-450 meters of effective range



Launcher rotation between +5 degrees and -90 degrees on elevation axis



Ability to perform 35 minutes of duty without payload



Multi-layered firing safety measures until operator's authorization is received

TM

SONGAR

SONGAR™

6 x 40 MM DRUM TYPE GRENADE LAUNCHER



FEATURES



National Design



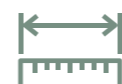
Close air support capability for critical military installations



Rapid response to known threats



Firing up to 6 grenades



400-450 meters of effective range



Launcher rotation between +5 degrees and -90 degrees on elevation axis



Ability to perform 35 minutes of duty without payload



Multi-layered firing safety measures until operator's authorization is received

TM

SONGAR

SONGAR™

3 x 81 MM MORTAR LAUNCHER



FEATURES



National Design



Operational Capability
Against Mobile Targets



Internal Security and Close
Air Support



Effective Destruction
Radius



Triple Mortar Hold-and-Release
Mechanism



Multi-layered firing safety measures until
operator's authorization is received



Ability to perform 35 minutes of duty
without payload



SONGAR™

SONGAR™

8 X TEAR / SMOKE GRENADE LAUNCHER



FEATURES



Sliding map and mission planning in autonomous flight



Capable of conducting operations within a 5-kilometer range



Firing up to 8 grenades



Executes direct impact on target through controlled free-fall deployment



Multi-layered firing safety measures until operator's authorization is received



Ability to perform 35 minutes of duty without payload



TM

SONGAR

DOGAY™

THE FIRST LIGHT OF FUTURE VICTORIES



DOGAY™

Dogay is an innovative drone developed by ASISGUARD for day and night ISR (Intelligence, Surveillance, and Reconnaissance) operations. Thanks to its high maneuverability, it provides effective operational capabilities even in challenging weather conditions, ensuring real-time imagery and information flow.

Flight without payload duration of up to 70 minutes, it becomes a reliable intelligence asset that enhances your operational decision-making. The advanced gimbal system, featuring day and thermal cameras, provides precise target identification, ensuring timely and informed decisions in dynamic operational environments.

Dogay is the architect of your future victories by providing the first light that forms the basis of every operation. It is an ideal choice for military professionals seeking a powerful and effective solution.

GENERAL FEATURES

- National design
- Ground Control Station (GSC)
- Autonomous and manual flight modes
- Ability to operate at 3000 meters above sea level and 300 meters above ground level
- Simultaneous transfer of telemetry data and images
- Route planning on the map and autonomous flight
- Automatic return home feature in critical battery and connection loss situations
- Ability to perform missions at a standard 5 km range

DOGAY™

SURVEILLANCE DRONE



FEATURES



National design



Day and night surveillance capability



Continuous data transfer



Anti-vibration mechanical stabilization system



Target tracking algorithm



Capability to conduct missions for 70 minutes without payload



Anti-jamming



DOGAY™

DOGAY™

81 MM SINGLE MORTAR LAUNCHER



FEATURES



National design



Internal security and close air support



Effective destruction radius



Single mortar grab and release mechanism



Mechanical and software ignition precautions



Capability to conduct missions for 70 minutes without payload



Day tv / thermal gymbal



DOGAY™

SAGAN OPERATIONAL CONCEPTS

Precision Strikes

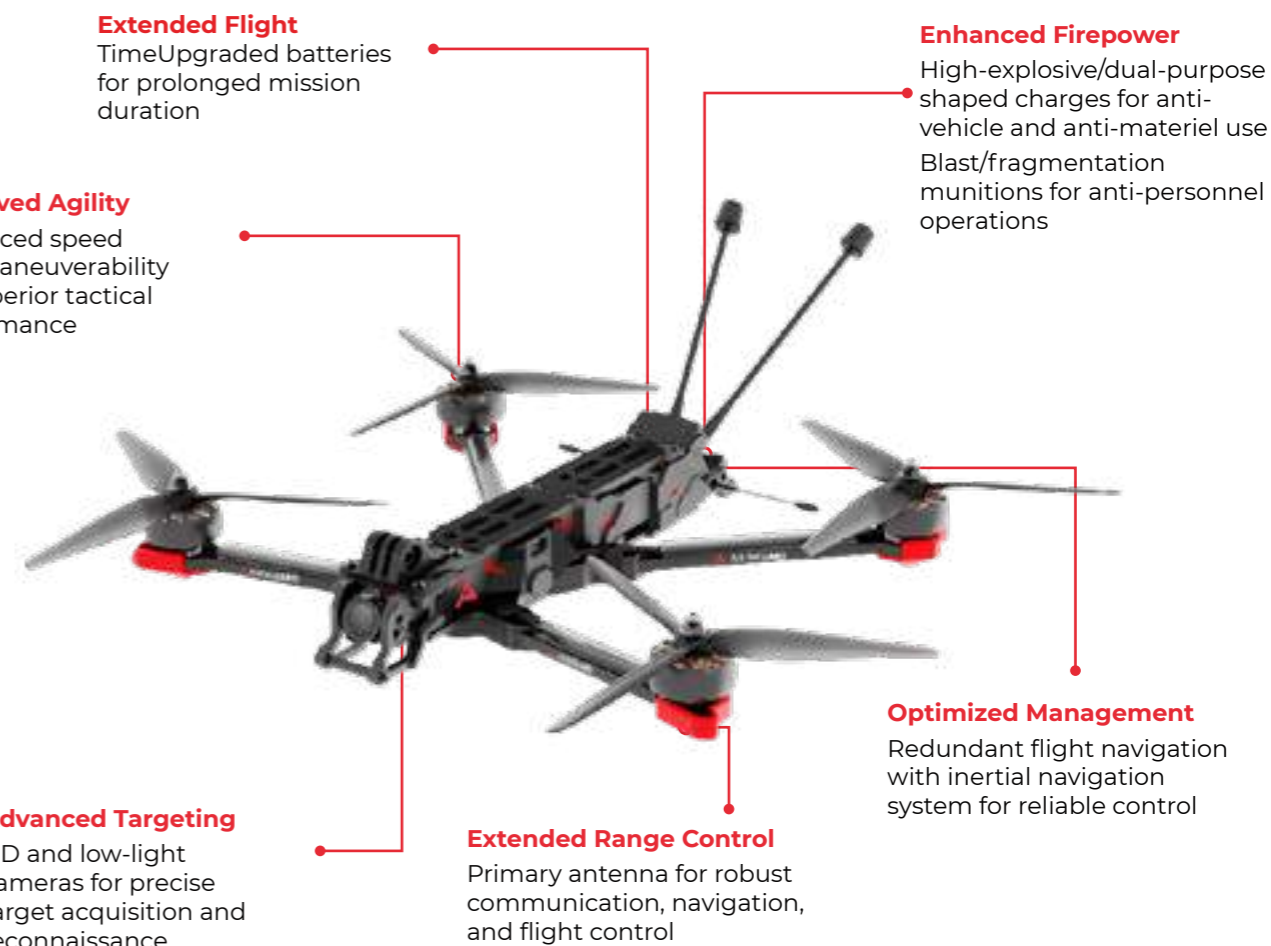
SAGAN can be used for precision-guided attacks on enemy infrastructure, vehicles, equipment, or personnel. These drones allow for highly targeted strikes, reducing the risk to human pilots and minimizing collateral damage compared to larger weapons.

Suppression of Enemy Defenses

SAGAN designed for one-way missions can be used to overwhelm or disrupt enemy air defense systems, radar installations, or communication networks. The goal is to create confusion and reduce the effectiveness of enemy defenses.

Decoy Operations

SAGAN can be used as decoys to divert enemy attention or simulate an attack, thereby enabling other military operations to proceed with reduced risk of detection or interference.



Specialized Missions

In scenarios where traditional weapons or personnel deployment is not feasible, SAGAN can be used to accomplish specific objectives, such as sabotaging a critical target or delivering a small explosive payload to a remote location.

Intelligence, Surveillance, and Reconnaissance (ISR) Support

SAGAN can support larger ISR operations by gathering critical information before completing their mission. The data gathered can be used to inform strategic decisions and military planning.

SAGAN

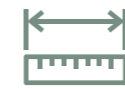
FPV KAMIKAZE DRONE



GENERAL FEATURES



National Design Fire Control System



6"-10" frame options available



Capability to conduct missions for 25 minutes without payload



Flight speed of 120 km/h



Over 10 minutes of flight time with a 1500 g payload



Digital/Analog data transmission



■ **SAGAN** delivers reliable performance in challenging conditions due to its high durability and speed. With **silent flight** and a **low radar signature**, it can penetrate defenses and execute missions with stealth.





ASISGUARD

DISPLAY FAMILY

FPGA / CPU BASED MONITORS

The AYN display family encompasses display systems designed for a variety of applications across both military and civilian platforms. A critical component of these display systems is the monitor, which facilitates the user's interpretation of data. ASISGUARD prioritizes the development of products that align with the specific needs of military operations while ensuring durability against severe environmental conditions. The monitors produced by ASISGUARD provide versatile solutions for both military and industrial sectors, offering a range of screen sizes and cost-effective options.



GENERAL FEATURES



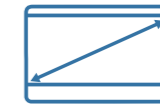
Low latency in video transmission and communication



Customisable hardware



Customisable hardware



High image quality and high resolution



High speed processor



Navigation option



Customisable operating system and application support



You are in Control without Delay

Monitors in the AYN family of displays allow users to watch and control low-latency video in real time.



Superior Image Quality

Leveraging its robust hardware and software capabilities, the system generates clear, vibrant, and realistic color images. Its high resolution, sharpness, and brightness ensure the consistent delivery of high-quality images, irrespective of varying light conditions.



All Your Content in One Place

It offers an integrated structure with CAN, Ethernet, UART and USB protocol supports as well as customisable analogue and digital inputs/outputs.



Design Adaptable to the Area of Use

Featuring minimal bezels and a contemporary design, the monitors within the AYN display family impart a refined aesthetic to your platform and elevate the overall viewing experience.



Ground Control Station

CONTROL/CONSOLE FAMILY

AG-D-GCS-2251 YKI (GROUND CONTROL STATION)

AG-D-GCS-2251 Ground Control Station (GCS) facilitates the operation of unmanned vehicles, enabling the configuration of semi-autonomous and autonomous driving missions, as well as conducting reconnaissance and imaging tasks. This system is designed for effective use by security personnel and armed forces.



AREAS OF USE

- Control of unmanned vehicles
- Control of payloads on unmanned vehicles
- Reconnaissance and imaging system



GENERAL FEATURES

Accessories

- Carry Case
- Charging Adapter
- Car Charger Adapter
- 2 System Battery

General Features

- 2 pcs 1920 x 1080 px Touch Screen
- 15 Toggle Switches, 32 Push Buttons, 1 5-Way Selection Button
- 3 Axis Joystick with 2 Buttons and 3 Proportional Outputs
- 1 Emergency Stop Button
- Replaceable Lithium- Ion Battery
- Logitech K310 Keyboard

Physical Features

- 120 x 60 x 30 cm (Closed box)/120 x 60 x 80 cm (Open box)

Computer System

- Intel 9th Gen 8 Core 3.5 GHZ Processor
- 32 GB DDR4 Ram
- 1 TB SSD SATA 3.0 Data Storage Disc

Communication System

- Intel 9th Gen 8 Core 3.5 GHZ Processor
- 32 GB DDR4 Ram
- 1 TB SSD SATA 3.0 Data Storage Disc

Computer System

- 3.5 mm Jack Headphone and Microphone Connection
- 2 X USB2.0/2 X USB3.0/4 X Gbps Ethernet
- 8 x SMA Connector (LTE/GPS/WIFI)
- SIM Card Interface
- Operator Recognition Camera
- Charging Socket Interface

Accessories

- Operating Temperature: -20°C, +50°C
- Storage Temperature: -40°C to +60°C
- Environmental Conditions: MIL-STD-810G Compliant
- Voltage Protection: MIL-STD-1275E Compliant
- Protection Level: IP65 (Bag Closed)





CONTROL/CONSOLE FAMILY

AG-H-GCS-1050 YKI (GROUND CONTROL STATION)

AG-H-GCS-1050 Ground Control Station (GCS) allows for the management of unmanned vehicles, including the oversight of semi-autonomous and autonomous driving functions. It also facilitates reconnaissance and imaging operations, making it suitable for deployment in security and military settings.



AREAS OF USE

- Control of unmanned vehicles
- Semi-autonomous and autonomous control
- Reconnaissance and imaging system



GENERAL FEATURES

Accessories

- Carry Case
- Charging Adapter
- Car Charger Adapter
- External Charger
- System Documents

2 System Battery

General Features

1280 x 800px 10.1" General Features

- 5 pcs Toggle Switch, 18 pcs Push Button
- 2 pcs Proportional Output Finger Joystick
- 1 pc Emergency Stop Button Replaceable Lithium- Ion Battery
- Replaceable Lithium- Ion Battery

Physical Features

52.6 x 32.8 x 13.5 cm

Communication System

- Communication via 4G/LTE
- Communication via WIFI
- Ability to communicate via Tactical Link connected to 1000Base-T ethernet port

Computer System

- 4-Core ARM Cortex-A76 MPCore Processor
- 16 GB LPDDR 4X RAM
- 128 GB SSD SATA3.0 Data Storage Disc

Interface

- 3.5 mm Jack Headphone and Microphone Connection
- 2 X USB3.0/1 X Gbps Ethernet
- 3 X SMA Connector (LTE/GNSS/WIFI)
- SIM Card Interface
- D38999 Military Connector with 19V Power Output
- POE Military Interface Connector
- Operator Recognition Camera
- Charging Socket Interface

System Features

- Operating Temperature: -20°C, +50°C
- Storage Temperature: -40°C to +60°C Environmental Conditions: MIL-STD-810G Compliant
- Voltage Protection: MIL-STD-1275E Compliant
- Voltage Protection: MIL-STD-1275E Compliant
- Protection Level: IP65 (Bag Closed)





CONTROL/CONSOLE FAMILY

AG-H-GCS-1051 YKİ (GROUND CONTROL STATION)

AG-H-GCS-1051 Ground Control Station (GCS) enables the operation of unmanned vehicles, including the management of semi-autonomous and autonomous driving capabilities, and supports reconnaissance and imaging tasks. It is designed for use in security and military applications.

AREA OF USE

- Control of unmanned vehicles
- Semi-autonomous and autonomous control
- Reconnaissance and imaging system



GENERAL FEATURES

Accessories

- Sunshade
- Neck Strap
- Carrying Strap
- Carrying Box
- External Adapter

Computer System

- 1920 x 1200 Resolution Display
- 10.1" Display
- 1000 Nit Display Brightness
- 10 Finger Capacitive Touch Screen
- Windows 11 Operating System
- Intel Core i5-10310U Processor
- 512 GB SSD

General Features

- Domestic / Original Design
- Aluminium Mechanical Body
- Hand Portable
- Safety Precautionary Shooting
- System Dimensions: 450*250*10mm
- Weight < 4.5kg
- Replaceable Li-Ion Battery
- Customised datalink integration
- Operating Time > 2 hours

- 16 GB RAM
- 8 Functional Button
- 3 Functional Joystick
- 2 Functional Round Button
- External USB Port
- External ETH Port
- Military Standard Connector
- Operating Voltage: 24V

Meteorological Conditions

- Operating Temperature: -10°C ~50°C
- Storage Temperature: -10°C ~50°C





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Technology Beyond Borders

 **ASISGUARD**

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