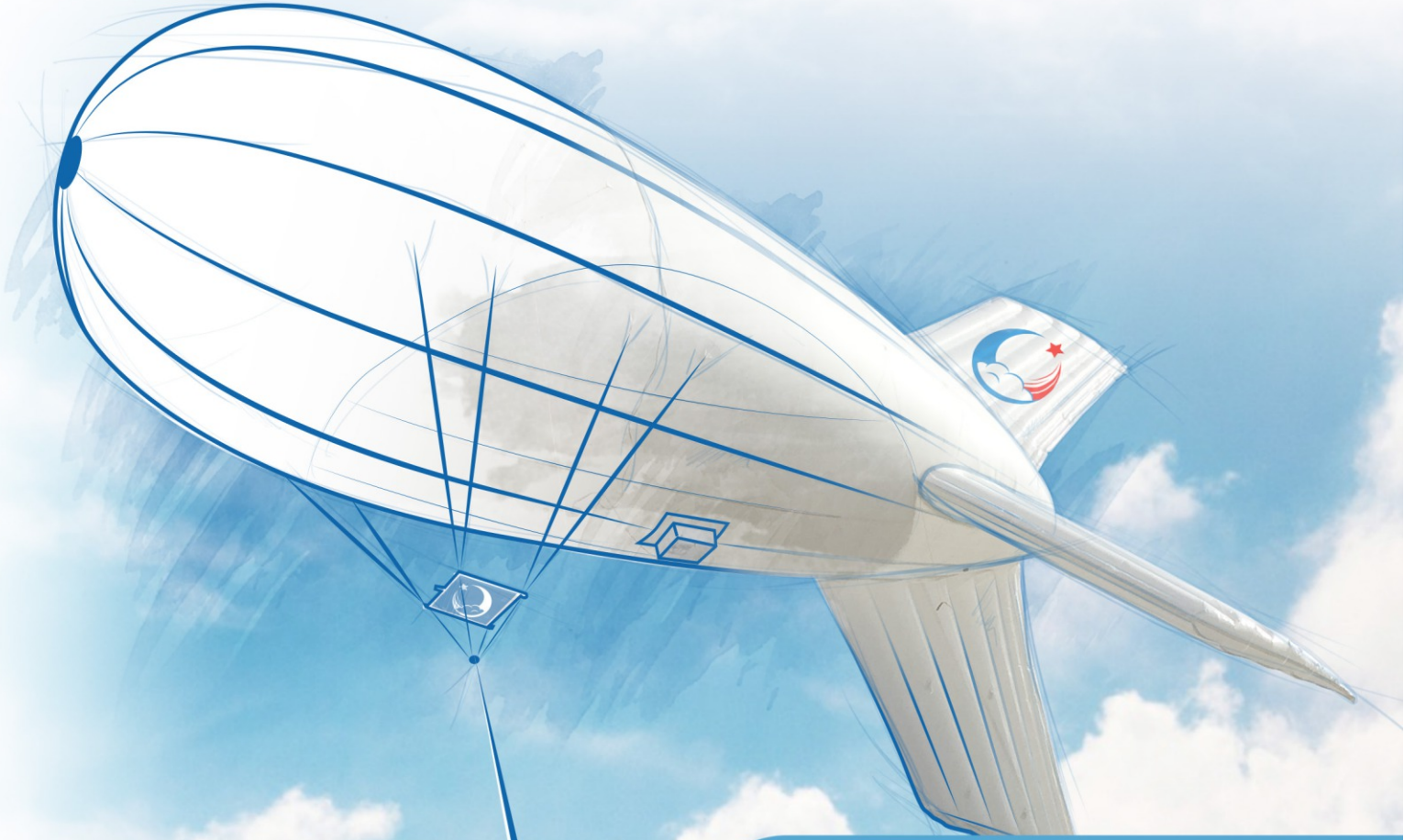




OTONOM
TEKNOLOJİ



DORUK



We are an engineering and technology company engaged in **long-endurance unmanned aerial vehicle-based solutions**, addressing a broad range of needs including border security, reconnaissance and surveillance, communication, search and rescue, and precision agricultural activities. We scale our solutions to meet your needs in a variety of fields, including the design and production of the aerial vehicle, and the integration of subsystems, including sensors and command control systems, onto the aerial vehicle. We also offer a **rental service**.

The approach we adopt for our products and solutions is based on the **life-cycle concept**, standing by our customers in all phases, including development, integration, qualification, user training, maintenance and updates.

The DORUK aerostat product family consists of balloons of different sizes, ranging from **10 m to 40 m**. Offering solutions in three different categories, namely **Tactical, Operational and Strategic**, the DORUK product family comes in various models that can be adapted to suit the users payload and altitude requirements.



The water-drop shape of DORUK, which can ascend to altitudes of **up to 1500 meters** can carry payloads of **up to 500 kg**, and can carry out its mission **unremittingly for durations of over one week**, allows the aerial vehicle to conduct its mission even under the most challenging of weather conditions, such as winds up to speeds of **40 Knots**.

Based on our ability to design tailor-made gondolas to suit different payloads, DORUK can carry out a variety of missions. Furthermore, DORUK has a **Mobile Anchoring Station** that has been designed and produced specifically for the platform, and which allows vertical take-off and landing, as well as safe flight and parking.

DORUK is interoperable with our OTONOM GCS ground station. Compatible with the **JAUS architecture**, the **OTONOM GCS** offers many capabilities, allowing integrated platform control, the ability to control numerous platforms from a single unit, monitoring of platform status information, generation and display of operator warnings, integrated payload control, map support, recording, and a changeable user interface.

DORUK offers its users a reliable and cost-effective platform that can carry out its mission for long periods at high altitudes.



Operational Class DORUK Technical Specifications:

1 week+ endurance time



Maximum 1000m operational altitude



150kg payload capacity



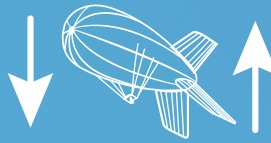
40 Knots wind speed resistance



Low operational Cost



Vertical take-off/landing with winch system



Modular gondola design for different payload capability



Platform design according to customers special needs



Technical Data

	TACTICAL	OPERATIONAL	STRATEGIC
Payload Capacity	<80 kg	20 kg-150 kg	80 kg-500 kg
Operational Altitude	100 - 500 m (AGL)	300 - 1000 m (AGL)	500 - 1500 m (AGL)
Endurance	1 Week	1 - 2 Week	2 Week
Gondola	Modular Gondola Design	Modular Gondola Design	Modular Gondola Design
Operating Temperature Range	-20°C / +55°C	-20°C / +55°C	-20°C / +55°C
Maximum Wind Speed	40 Knot	40 Knot	50 Knot
Pressurizing System	Automatic	Automatic	Automatic
Length	10-17,5 m	18-28 m	32-40 m
Max. Height (Parking Postion)	7,5-13 m	13-20,5 m	24-30 m
Max. Volume	100-460m ³	435-1700 m ³	2450-4780 m ³
Mooring Station	Mobile	Mobile	Fixed
Power Transmission	0 - 1,5 kW	1 - 5 kW	3 kW
Hauling Speed (meter/minute)	'12-25	'12-30	'15-30
Lifting Gas	Helium	Helium	Helium

TACTICAL CLASS

An easy-to-use aerostat family, it is able to meet a broad range of tactical needs by being rapidly deployable in various fields of operation, and with a 24/7 mission capability.

OPERATIONAL CLASS

Is an aerostat system with 1,000 metre operational altitude, providing reconnaissance, surveillance and communication capabilities at long ranges. It is highly wind-resistant and stable, and with a 24/7 mission capability.

STRATEGIC CLASS

Is the ideal solution for critical missions at long ranges and with long mission durations. This durable solution offers a high carrying capacity and operational altitude, allowing the use of different payloads simultaneously, and with a 24/7 mission capability.

**FIELD TESTED
AND
APPROVED**



Application Areas

Marine and Port Traffic

Tracks vessels cruising in the surrounding seas and those anchored in ports; carries out smuggling controls; and ensures constant port security, at day and night.



Environment Protection

Carries out continuous surveillance over a wide area; facilitates the detection of natural disasters such as forest fires, the identification of damage to the environment, and the monitoring of changes in natural resources.



Security of Critical Facilities

Carries out constant surveillance of critical facilities built on particularly large areas that require 24-hours uninterrupted and efficient surveillance, as well as the surrounding area.



Reconnaissance, Surveillance and Intelligence

Allows the collective and uninterrupted use of various payloads, such as electro-optic systems, radars, signal intelligence and acoustic sensors; and offers reconnaissance, surveillance and intelligence capabilities in critical security zones, as well as land and maritime borders.



Communication

In cases where the coverage area or communication infrastructure is insufficient, extends the horizon line and expands the coverage area to a much wider region, allowing direct communication between assigned units over a broad area.



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