



DASAL

MEET THE NEW STARS



AT THE BASE OF **DASAL**

DASAL is a joint venture of ASELSAN and ALTINAY Defense

CONTENT



ISR Platforms

- + Bee-Eater
- + Swallow
- + Owl

CARGO Platforms

- + Cargo 15
- + Cargo 75
- + Cargo 150

DEFENSE Platforms

- + Falcon
- + Eagle
- + Cargo 75-D



ABOUT DASAL

OUR MISSION is

To be a force multiplier that will increase both our country's and allies' tactical and operational capabilities by developing reliable aircraft technologies and R&D studies for the national and international arena.



OUR VISION is

To become a world-class solution center that produces Technologies and solutions, which will safely perform challenging and extraordinary missions and increase the quality of human life.



Defense & Security



Surveillance & Reconnaissance



Communication in Emergency



Search & Rescue



Logistic & Cargo



Electronic Warfare



Agriculture & Nature



Fire Prevention, Fighting & Control



MESSAGE of the GENERAL MANAGER

We operate with the appreciation of our role in the Unmanned Aircraft Systems industry and with the recognition of our substantial responsibilities.

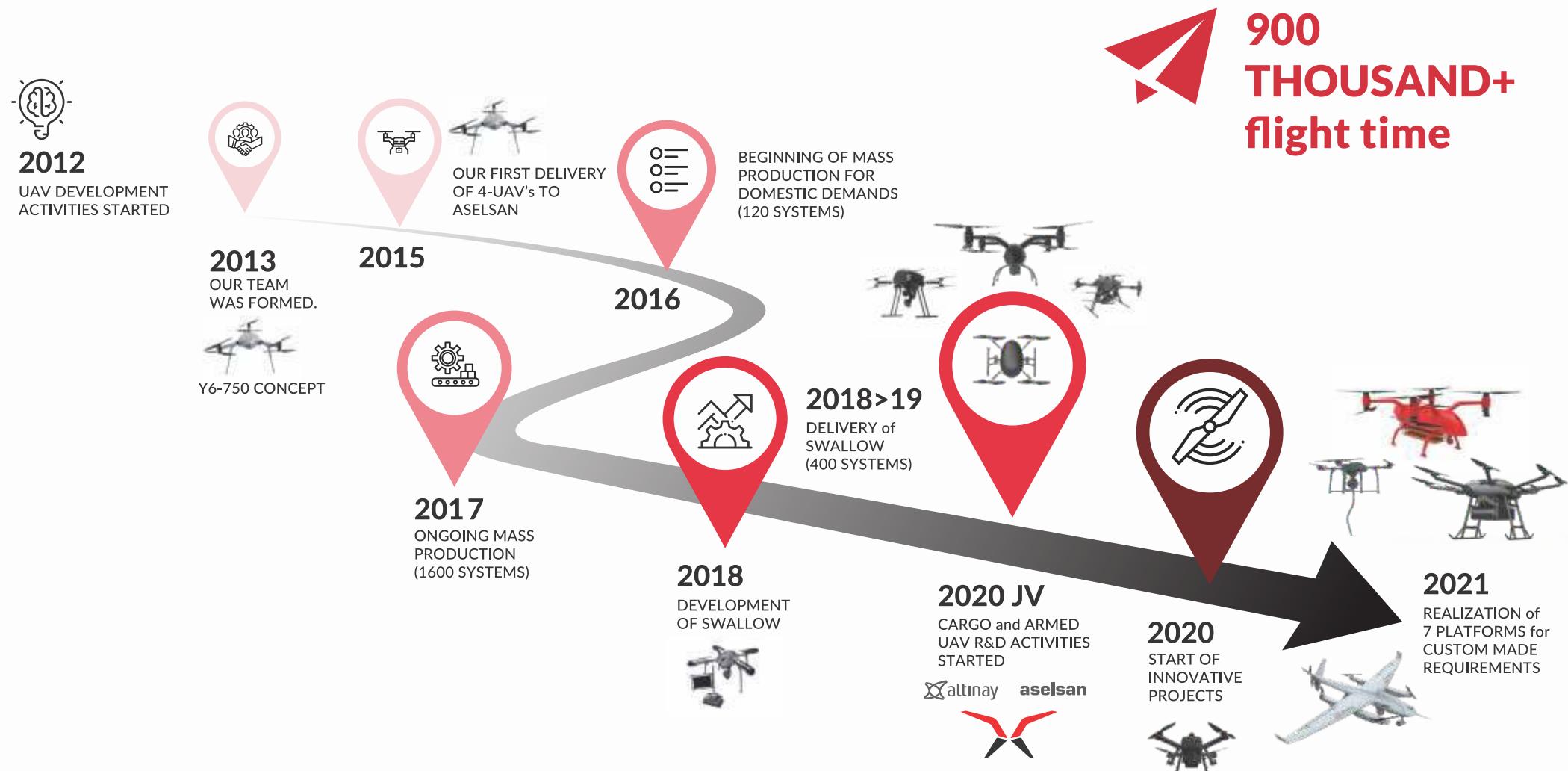
Due to our agile organizational structure and the targets set by our dedicated, dynamic and decisive team, we are confident that we will create a game-changing value for our shareholders, for our country and for international markets.

Throughout this honorable journey, we will continue providing added value to our country. We will pursue our goal of designing and developing technologies of high innovative value to our country and allies.

Z. Burak MERCAN



HISTORY





RECONNAISSANCE MODELS

3 SOLUTIONS of DASAL

01



Moving Vehicle Integrated
UAV Platform

BEE-EATER



02



Regular Surveillance
Platform

SWALLOW



03



Tethered UAV
Platform

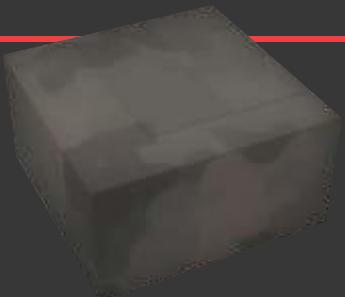
OWL



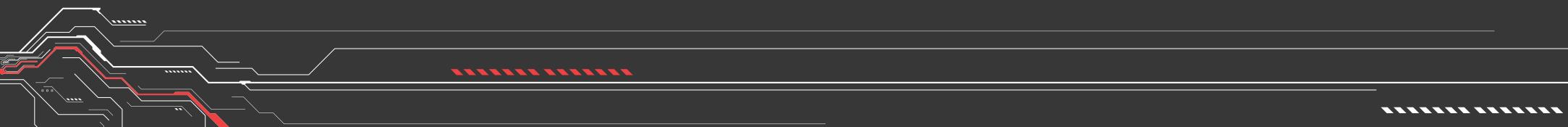


DASAL AEROSPACE TECHNOLOGIES

BEE-EATER



LAND&NAVAL
VEHICLE INTEGRATED
SURVEILLANCE UAS





BEE-EATER

Bee-Eater is designed to manage continuous missions due to its specially designed landing port enable to change batteries automatically and its autonomous take off and landing from land and naval vehicles in motion.



MAIN FEATURES

- + Autonomous take off and landing from moving vehicle
- + Precision Landing Algorithm up to 40 km/h vehicle speed.
- + Autonomic Battery Management System
(1 on UAV +5 Back Up)
- + Superlight EO/IR Gimbal
- + Image Processing (Target Detection and Classification)
- + Live Photo and Video Transfer
- + Specialized Flight and Mission Computer
- + Semi-Autonomous Flight Module
- + Fully Autonomous Navigation
- + Automatic Battery Switch about 30 seconds without human factor
- + Smart Battery Management System



20 min



0,2 kg



5 km



DASAL AEROSPACE TECHNOLOGIES

SWALLOW



**LIGHT CLASS
SURVEILLANCE UAV**





SWALLOW

Swallow is a perfect reconnaissance & surveillance platform due to its over 8 km flight range and 55 minutes of endurance. Thanks to its special design and military grade production level it can operate under harsh and tough weather conditions as well.



MAIN FEATURES

- + Maximum 55 minutes of flight time
- + 8 km operational radius
- + Up to 1,5 kg payload capacity
- + MTOW: 7 kg
- + 3 axis EO/IR gimbal
- + Live photo and video transfer
- + Semi-autonomous flight
- + Fully autonomous navigation
- + Below 5 minutes installation
- + Ergonomic design
- + Battery switch in 30 seconds
- + Special back pack is designed to fit in luggage of passenger car
- + Smart battery management system



55 min



1,5 kg



8 km

LIGHT

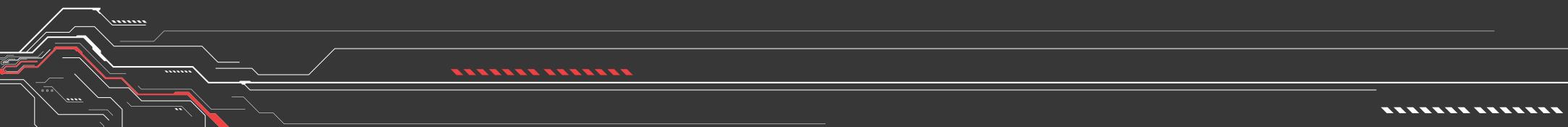


DASAL AEROSPACE TECHNOLOGIES

OWL



TETHERED
INTELLIGENCE UAV





OWL

Owl is an ISR platform, observer for surveillance, where the mission requires 7/24 continuous performance. Preferentially for critical infrastructures, border control, natural disasters and security of events; owl finds its place due to its easy to use operational capabilities.



MAIN FEATURES

- + 60 m to 100 m operational altitude
- + 40 seconds ascent time to max. altitude
- + Up to 1 kg payload capacity
- + 3 axis light EO/IR gimbal (x30 zoom)
- + Live photo and video transfer
- + Semi-autonomous flight
- + Back-up battery for emergency landing
- + Below 5 minutes installation due to special back pack designed to fit in luggage of a passenger car
- + Parachute (optional for urban usage)
- + Adjustable, preprogrammed altitude and mission software
- + Ergonomic design
- + Plate Reading from 300 m distance



7 / 24



1 kg



60 > 100 m



ISR



SOLUTIONS



DEFENSE UAV's of DASAL

MIDI CLASS



MIDI CLASS



HEAVY CLASS



FALCON



EAGLE



CARGO 75-D





FALCON



**5.56mm
ARMED UAS**





FALCON

Falcon is a high performance armed UAS with 2 axis stabilized gimbal, 5.56 mm rifle , 100-200 ammunition capacity and image processing for target detection.



MAIN FEATURES

- + 2 axis stabilized rifle platform
- + High performance precised stabilization system
- + Max. 200 ammo capacity
- + Image processing
- + Target detection and definition
- + MTOW 67 kg
- + Payload max 15 kg
- + 10 km operational radius
- + 55 km/h maximum horizontal speed
- + 30 minutes flight time (with 100 ammo)
- + 3 axis EO/IR gimbal
- + Live photo and video transfer
- + Semi-autonomous flight
- + Fully autonomous navigation
- + Obstacle avoidance
- + Designed to be transferred by 4x4 vehicle or pickup
- + Foldable arms (optional)
- + Dynamically foldable landing gears (optional)



30 min



15 kg

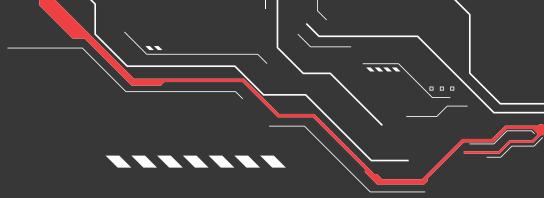


10 km

MIDI



DASAL AEROSPACE TECHNOLOGIES



EAGLE



DRONEHUNTER UAV SYSTEM

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EAGLE

Eagle, the dronehunter, encounters the enemy drone based on the data received from the radar system. According to the threat level, the system captures the enemy drone with its netgun.



MAIN FEATURES

- + Netgun for drone hunting
- + Carries enemy drone up to 3 kg
- + Target detection and definition
- + MTOW 67 kg
- + Payload max 15 kg
- + 10 km operational radius
- + 55 km/h maximum horizontal speed
- + 30 minutes flight time
- + 3 axis EO/IR gimbal
- + Live photo and video transfer
- + Semi-autonomous flight
- + Fully autonomous navigation
- + Obstacle awareness
- + Designed to be transferred by 4x4 vehicle or pickup
- + Foldable arms (optional)
- + Dynamically foldable landing gears (optional)



30 min



15 kg



10 km

MIDI



DASAL AEROSPACE TECHNOLOGIES

CARGO 75-D



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**HEAVY CLASS
DEFENCE UAS**



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CARGO 75-D

The multirole Cargo 75-D Platform performs different military operational missions due to its modular payload design. The platform has the ability to operate efficiently with 5.56mm machine rifle, minigun or different bomb options up to 70 kg payload capacity.



MAIN FEATURES

- + MTOW 360 kg
- + Payload max 70 kg
- + 20 km operational radius
- + 100km/h maximum horizontal speed
- + 45 minutes flight time (50 kg)
- + 3 axis EO/IR gimbal
- + Live photo and video transfer
- + Semi-autonomous flight
- + Fully autonomous navigation
- + Smart battery management system
- + Radar technology
- + Direction detection with image processing

HEAVY



45 min



70 kg



20 km



DASAL AEROSPACE TECHNOLOGIES

MIDI CLASS



HEAVY CLASS



HEAVY + CLASS



CARGO 15



CARGO 75



CARGO 150



3 CARGO UAV's of DASAL

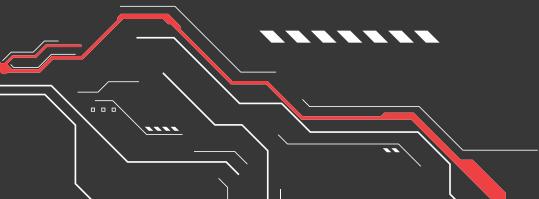


DASAL AEROSPACE TECHNOLOGIES

CARGO 15



MODULAR
CARGO UAV





CARGO 15

Cargo 15 is a high performance cargo platform which is able to transfer 15 kg off different payloads to a range over 10 km with 55 km/h horizontal speed.



MAIN FEATURES

- + 15 kg capacity cargo module
- + MTOW 67 kg
- + 10 km operational radius
- + 55 km/h maximum horizontal speed
- + 30 minutes flight time
- + 3 axis EO/IR gimbal
- + Live photo and video transfer
- + Semi-autonomous flight
- + Fully autonomous navigation
- + Obstacle avoidance
- + Designed to be transferred by 4x4 vehicle or pickup
- + Foldable arms (optional)
- + Dynamically foldable landing gears (optional)



30 min



15 kg



10 km

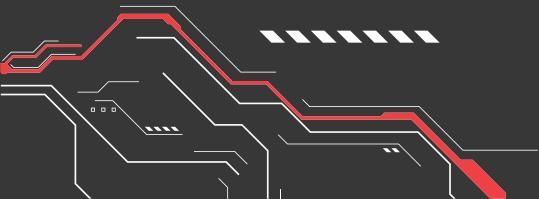


DASAL AEROSPACE TECHNOLOGIES

CARGO 75



**HEAVY CLASS
CARGO UAS**





CARGO 75

Cargo 75 is a high performance cargo platform which is able to transfer 75 kg different payloads to a range over 20 km with 100 km/h horizontal speed.



MAIN FEATURES

- + MTOW 360 kg
- + Payload max 75 kg
- + 20 km operational radius
- + 100 km/h maximum horizontal speed
- + 45 minutes flight time (50 kg)
- + 3 axis EO/IR gimbal
- + Live photo and video transfer
- + Semi-autonomous flight
- + Fully autonomous navigation
- + Smart battery management system
- + Radar technology
- + Direction detection with image processing



45 min



75 kg



20 km

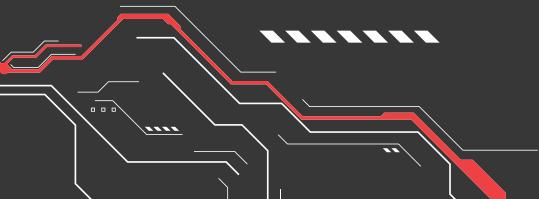


DASAL AEROSPACE TECHNOLOGIES

CARGO 150



☰ HEAVY CLASS+
CARGO UAS





CARGO 150

Cargo 150 is a high performance cargo platform which is able to transfer 150 kg of different payloads to a range over 40 km with 100 km/h horizontal speed.



MAIN FEATURES

- + MTOW 630 kg
- + Maximum payload 150 kg
- + 40 km operational radius
- + 100 km/h maximum horizontal speed
- + 45 minutes flight time (with 150 kg)
- + 3 axis EO/IR gimbal
- + Live photo and video transfer
- + Semi-autonomous flight
- + Fully autonomous navigation
- + Smart battery management system
- + Radar technology
- + Direction detection with image processing



45 min



150 kg



40 km



CARGO

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PLATFORMS

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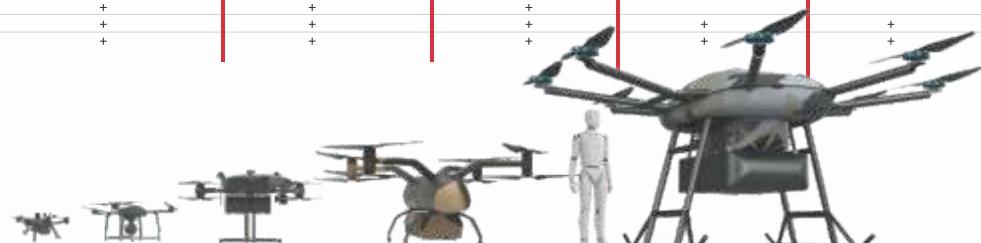




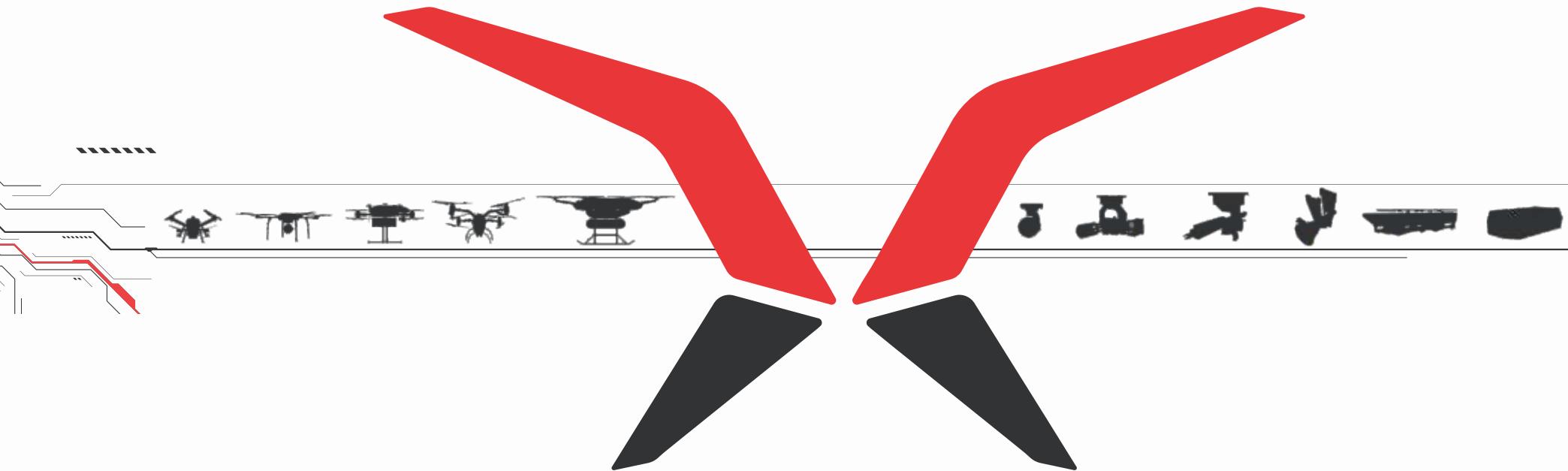
TECHNICAL SPECIFICATION TABLE



SPECS/TYPE	BEE-EATER	SPARROW	OWL	FALCON	EAGLE	CARGO 15	CARGO 75 / CARGO 75-D	CARGO 150
GENERAL								
MTOW	4,4 kg	7 kg	7 kg	67 kg	67 kg	67 kg	360 kg	630 kg
MSL (m)	3000	3000	-	3000	3000	3000	3000	3000
AGL (m)	500	1000	60	1000	1000	1000	1000	1000
Operating Temperature	-20C/+50C	-30C/+55C	-30C/+55C	-20C/+50C	-20C/+50C	-20C/+50C	-20C/+50C	-20C/+50C
FLYING								
Flight Time	20 min	45 min	45 min	30 min	30 min	30 min	45 min	45 min
Horizontal Speed	65 km/h	44 km/h	-	55 km/h	55 km/h	55 km/h	100 km/h	100 km/h
Range	5 km	8 km	-	10 km	10 km	10 km	22 km	40 km
PAYOUT								
	0,2 kg 3 Axis Stabilized Gimbal Take off landing from moving vehicle Full Automatic Battery Changing & Charging System	1 kg 3 Axis Stabilized Gimbal	1 kg 3 Axis Stabilized Gimbal Tethered System	15 kg KCR 556 Gun 100 Bullet Magazine Special Anti-Kickback System	15 kg 3 Axis Stabilized Gimbal Net Gun Pedestal	15 kg 3 Axis Stabilized Gimbal Ammunition Cargo	75 kg 3 Axis Stabilized Gimbal Ammunition Cargo	150 kg 3 Axis Stabilized Gimbal Ammunition Cargo
GROUND CONTROL STATION								
"Military-type tactical map support (Compatible with RASTER and DTED)"	+	+	+	+	+	+	+	+
Defining restricted area	+	+	+	+	+	+	+	+
Real-time video displaying and recording	+	+	+	+	+	+	+	+
Total Flight Time and Maintenance Control	+	+	+	+	+	+	+	+
Second Commander Screen for Traceability (optional)	+	+	+	+	+	+	+	+
FLIGHT CONTROL COMPUTER								
Autonomous Return Home without GNSS	+	+	+	+	+	+	+	+
Task switching (Constant mission ability)	+	+	+	+	+	+	+	+
Full Autonomous Navigation	+	+	+	+	+	+	+	+
Follow me mode	+	+	+	+	+	+	+	+
Autonomous Return Home when the link is broken	+	+	+	+	+	+	+	+
Remaining Flight Time Calculator	+	+	+	+	+	+	+	+
Redundant Sensor System	+	+	+	+	+	+	+	+
Advanced Sensor Fusion	+	+	+	+	+	+	+	+
Obstacle Avoidance	+	+	+	+	+	+	+	+
ADS-B Transponder	+	+	+	+	+	+	+	+
Redundant GNSS System			+		+	+	+	+
Anti-JAM GNSS Solution (Optional)	+	+	+	+	+	+	+	+
LTE / 4G Communication Solution (Optional)	+	+	+	+	+	+	+	+
3 x Redundant Autopilot and GNSS System						+	+	+
POWER SUPPLY								
High Capacity Smart Battery Pack Solution	+	+	+	+	+	+	+	+
Ergonomic Battery Management	+	+	+	+	+	+	+	+
Battery Level Indicator	+	+	+	+	+	+	+	+
Hybrid System with ICE*						+	+	+
PROPELLION SYSTEM								
Latest Technology Brushless DC Motor	+	+	+	+	+	+	+	+
Carbon Fiber Propellers	12"	24"	8 x 30,5"	8 x 30,5"	8 x 30,5"	8 x 30,5"	8 x 65"	8 x 60"
EASY TO USE								
Attachable / Detachable Rotor Arms		+	+	+	+	+	+	+
Attachable / Detachable Landing Gear		+	+	+	+	+	+	+
Fits easily in its backpack			+					
Ready to operate in 5 min	+	+	+	+	+	+	+	+
Navigation Lamps for easy to follow	+	+	+	+	+	+	+	+
Easy transport by Pickup Whicles	+	+	+	+	+	+	+	+
Quick Battery Swap	+	+	+	+	+	+	+	+
Plug and Play Gimbal	+	+	+	+	+	+	+	+







DASAL AEROSPACE TECHNOLOGIES

DASAL is a joint venture of **aselsan** and **Altinay**
Defence

www.dasal.com.tr