MARTLET MI-2
LONG ENDURANCE MINI UAS

HEIGHT
TECHNOLOGIES

760

DATASHEET

MADE IN NETHERLANDS

ACT ON AERIAL
INTELLIGENCE

The MI-2 is a portable long endurance multirotor, ideal for monitoring high-risk situations where decisions need to be made quickly. The system is designed to make minimal noise for covert day and night observation.
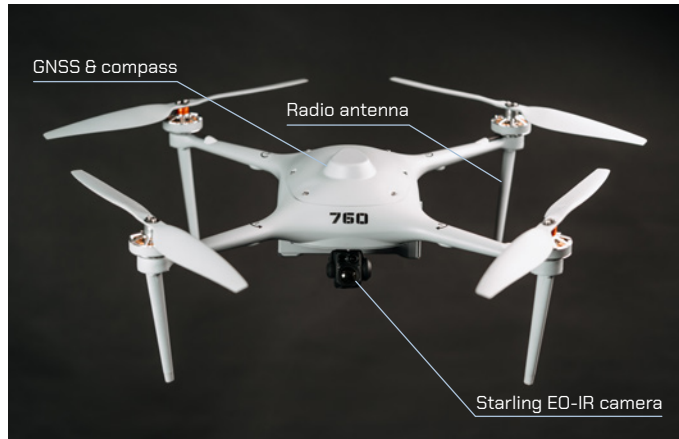
The frame and propellers of the Martlet MI-2 are all built with aviation-grade carbon composite, kevlar, and glass fiber materials - because every 1% counts..

AIRCRAFT OPERATING ENVELOPE

FORM FACTOR	L	W	H	
Frame size	40	40	15	cm
Proppeller size		17		inch
Empty weight		1600		grams
Weight with battery		2995		grams
Max take-off weight		3995		grams

ENVIRONMENT

Operational temperature	-20 – +50	°C
Precipitation	IP54	

GNSS & compass

Radio antenna

760

Starling EO-IR camera

SPEED		
Max wind speed	30	knots
Max airspeed	40	knots
Max speed	21	m/s
Cruising speed	10	m/s
Ascent speed	3.5	m/s
Descent speed	3	m/s

ENDURANCE MAX & WITH PAYLOADS

Max flight time	70	min
DragonEye / X80 / Starling	65	min
NightHawk-UZ	60	min

PERFORMANCE & RANGE

Covert distance (sound)	150*	meter
Typical deployment time	< 2	min
Typical radio range (RLoS)	20	km
Theoretical range	100	km

*At 120m AGL

ALTITUDE LIMITS

AMSL	3500	meter
AGL	500	meter

MARTLET GROUND CONTROL STATION

SPECIFICATIONS

Weight	927 grams
Dimensions (LxWxH)	25.6 x 14 x 6.8 cm
Connections	USB-C 3.0, Nett Warrior EUD compatible
Radio Options	Silvus, Microhard, Doodle Labs, and more
Operating Software	Android 11 (Windows 11 on request)
CPU	Qualcomm® SDM660 2.2/1.843GHz
Memory	4GB (LPDDR4)
Display	7" WXGA 1280 x800 px, 750nit
Certification	MIL-STD-810-H
Compliance	CE, ROHS compliant
Precipitation	IP65
Operational Temperature	-20 — +50 °C

MARTLET GCS

The Martlet Ground Control Station (GCS) is a durable, portable control unit equipped with MIL-STD components. Designed for single-operator use in any environment or weather condition and interoperable on all Martlet UAV systems. With Nett Warrior compatibility and Swappable Radio Modules (SRM), this tactical controller provides exceptional interoperability and radio-agnostic capabilities. In addition to its internal battery, two swappable batteries enable continuous operation.

DATALINK SPECIFICATIONS

Encryption	AES256 / AES128	bit
Frequency range	2025 – 2500 (+5000 – 5200)	MHz
Max transmitting power	500	mW
Max transmitting distance	15	km
Latency	0.1	sec

HT-SDR DATALINK MODULE

As standard, the Martlet sUAS are equipped with the in-house developed software defined digital datalink has the ability to use a predefined custom encryption-key, to automatically "hop" between frequencies and to operate in a wide range of user-definable NATO harmonized frequency ranges:
2.0 – 2.5 GHz + 5.0 – 5.2 GHz (OPTIONAL)

MARTLET SOFTWARE CAPABILITIES

TARGET ACQUISITION / POINTS OF INTEREST

The software shows the real-time camera footprint on the map, calculates the location of the CAM-footprint and POI in **UTM**, **MGRS** and **GEO** coordinates and can measure various distances that could be valuable to the men on the ground. It enables operators and first responders to maximise situational awareness through advanced aerial intelligence. The Martlet GCS software can load multiple custom (military) maps, giving operators better access to more actionable intelligence when interpreting their live video feed with one of their preloaded maps.

GNSS-DENIED FLIGHTS / DEAD RECKONING

In case of loss of GNSS/GPS or during a jamming or spoofing attack, the system automatically initiates Dead Reckoning Mode, enabling it to fly in GNSS-denied areas.

BINGO FOR MAXIMAL FOCUS

The pilot has a perfect overview of all important indicators for a safe flight. The Bingo parameter calculated the remaining mission time (time remaining before the UAV needs to go back to the home-point). This allows the pilot to fully focus on the mission. The system always ensures a timely flight back to the desired landing location.

MI-2 PAYLOAD OPTIONS

MICRO STABILIZED GIMBALLED CAMERAS

The MI-2 can be equipped with a wide range of dual EO/IR sensors, leaders in micro-stabilised gimbal mounted cameras. Built for long-range observation, the dual EO/IR and EO-only payloads offer HD image quality and unmatched X40- or X80-fold zoom to capture detailed images such as number plates and faces.

GEOLOCATION

The POI function captures the position of the camera, and its line of sight, and extracts the location of observed objects with < 5 meter accuracy to enhance real-time intelligence.

NIGHTHAWK-UZ

EO resolution	1280 x 720 px
EO zoom	x20 + x2 (total x40) continious
EO HFOV	60° WFOV – 3° NFOV – 1.5° DFOV
LWIR resolution	1280 x 720 px
LWIR zoom	x4 continious
LWIR HFOV	25° WFOV – 6° DFOV

Multi payload option available with the quick-release module.
Compatible payloads are listed on the next page (7).

MI-2 PAYLOAD OPTIONS
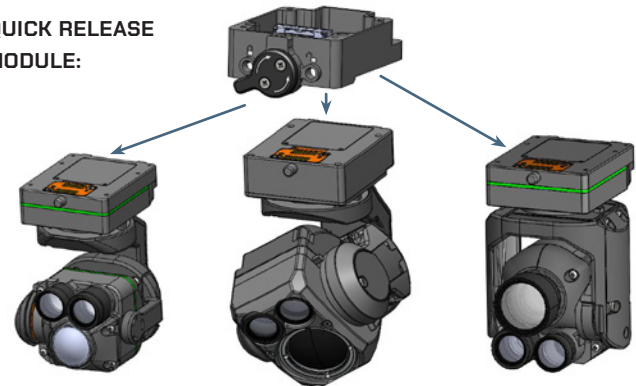
DRAGONEYE

EO resolution	1280 x 720 px
EO zoom	x20 + x2 (total x40) continious
EO HFOV	60° WFOV – 3° NFOV – 1.5° DFOV
LWIR resolution	640 x 480 px
LWIR zoom	x4 continious
LWIR HFOV	32° W.FOV – 8° DFOV

STARLING

EO resolution	1280 x 720 px
EO zoom	x20 + x2 (total x40) continious
EO HFOV	60° WFOV – 3° NFOV – 1.5° DFOV
LWIR resolution	640 x 480 px
LWIR zoom	x4 continious
LWIR HFOV	18° WFOV – 4.5° DFOV

X80

EO resolution	1280 x 720 px
EO zoom	x40 + x2 (total x80) continious
EO HFOV	60° WFOV – 1.5° NFOV – 0.75° DFOV

QUICK RELEASE MODULE:

MARTLET MI-2 | SYSTEM CONTENT

TROLLEY TRANSPORT CASE

IN THE CASE

- Martlet MI-2 UAV system
- Martlet 18.5" propeller set
- Martlet Ground Control Station
- Tripod for Martlet Ground Control Station
- 2x Flight batteries (18000 mAh | 22.2 V)
- UN3840 certified flight battery case (fits 2x flight batteries)
- Battery charger kit
- Toolbox

CLASS-I MINI UAS
MADE FOR ISTAR OPERATIONS

HEIGHT
TECHNOLOGIES

SEE WITHOUT
BEING SEEN

Pictured here is the Martlet MI-2**S**

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