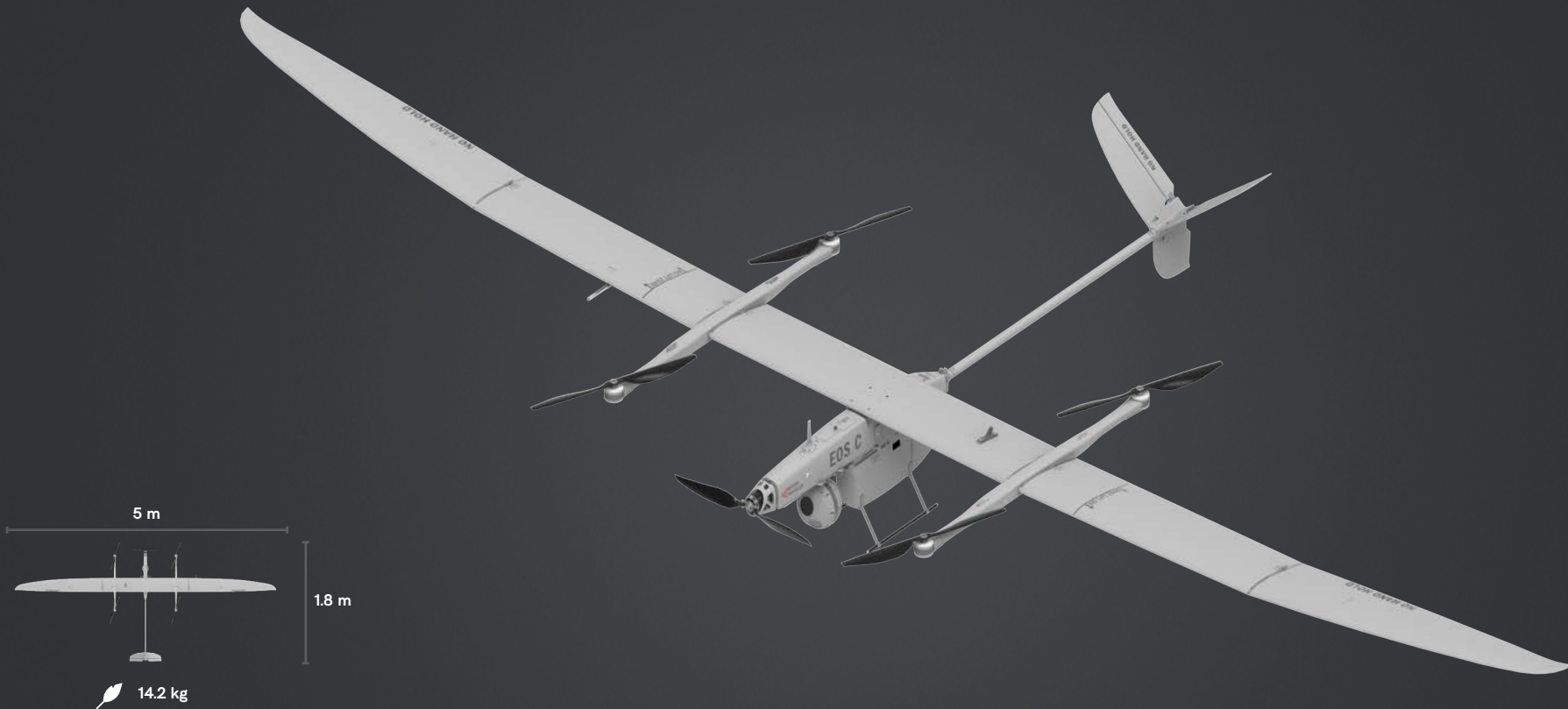


EOS VTOL UAS

THREOD

SYSTEMS



PERFORMANCE

Up to 3 hours endurance
Cruise speed 61 kmh | 33 kts
Max speed 108 kmh | 58 kts
Ceiling 4500m AMSL | 15 000 FT AMSL
Takeoff 3500m AMSL | 11 000 FT AMSL

ADVANTAGES

Vertical take-off and landing
Compact and transportable
Excellent ISR performance
Virtually silent operation
5 minutes from transport to flight
Non-ITAR

ISR PAYLOAD

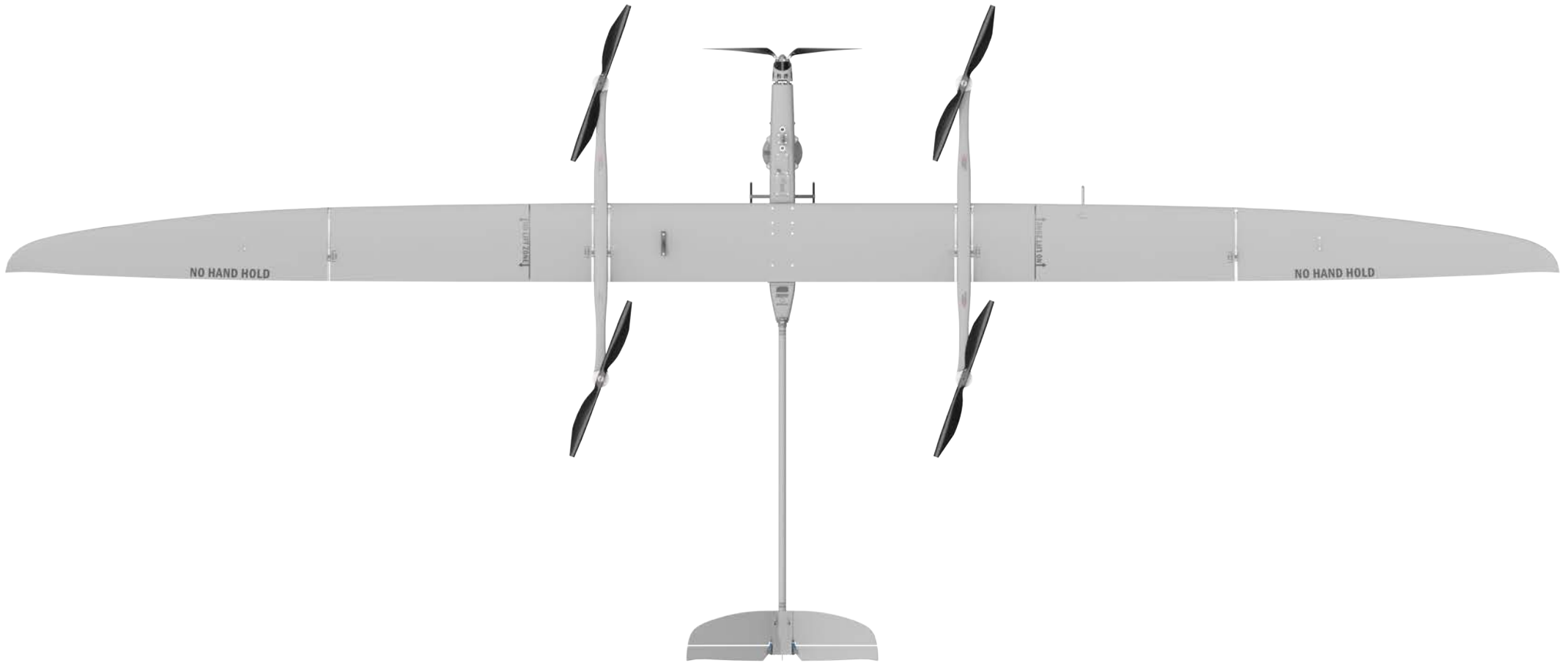
Dual EO/IR sensors
Full HD 30X optical zoom
Georeferenced imagery
STANAG 4609 KLV / H264
Video lock and tracking
Geo pointing

COMMUNICATION

RLOS 50km range
AES-256 encryption
Advanced anti-jamming
MESH/MANET network
Communication relay mode
Moode-S ADS-B transponder

ENVIRONMENTAL

Temperature -20° to +50°C | -4° to +122°F
Precipitation 10 mm/h | 0.4 inches/h
Wind penetration 16 m/s | 31 kts



PERFORMANCE

Endurance	Up to 3h with payload	
Maximum distance	190 km	118 miles
Communication range (RLOS)	50 km	31 miles
Cruise speed	61 km/h	33 kts
Max speed	108 km/h	58 kts
Service ceiling (AMSL)	4500 m	15 000 ft
Max takeoff altitude (AMSL)	3500 m	11 000 ft
Precipitation	10 mm/h	0.4 inches/h
Wind penetration	16 m/s	31 kts
Vertical flight wind tolerance	12 m/s	23 kts
Temperature	-20..+50°C -4°..+122°F	

PHYSICAL

Wingspan	5m	196.8 inches
Overall length	1.8m	70.8 inches
Overall height	0.45 m	17.7 inches
Payload capacity	1.1 kg	2.42 lbs
Mass (MTOW)	14.2 kg	31.1 lbs

COMMUNICATION

Frequency	2.2-2.5 GHz or 4.4-4.9GHz
Bandwidth	5/10/20 MHz
Encryption	AES-256
Range	Up to 50 km RLOS
Type	MIMO / MANET / MESH

FLIGHT CONTROL

Autopilot	Fully autonomous Waypoint navigation Fly-by-camera mode Geo-fencing
Safety	Programmable failsafes Automatic return to home
Failsafe routes	Dead reckoning Continuous health monitoring Servo and ESC feedback

OPERATIONAL

Deployment	Vertical takeoff and landing
Takeoff/landing site	Obstacle free area 15x15 m
Instrumentation	GPS/GLONASS/GALILEO Barometric altimeter, radar altimeter Pitot tube with drain Inertial Navigation System (INS) Servo feedback and logging ESC telemetry and logging
Propulsion	Fully electric / battery powered
Air Traffic Control	Optional Mode-S / ADS-B Out transponder
Emergency tracking	Optional GSM / GPS tracker
Visibility	LED Navigation and anti-collision lights IR strobe / light
Battery	Lithium-polymer smart battery with BMS Automatic self storage feature
Features	Fire support utility, video on map Reporting, image analytics tools Video recording and instant playback

PAYLOAD

Type	2-axis stabilized gimbal 30X optical, 3X digital zoom Resolution 1920x1080 HFOV 64.7° - 2.3° DRI: 14/6/2.5 km human 22/12/6 km vehicle
LWIR sensor	HFOV 18° 8X digital zoom Resolution 640x512 DRI: 1280/320/160 m human 3850/950/295 m vehicle
Optional LRF Video	Range 2500 m NATO target 1920x1080p H.264 downlink High quality on-board recording STANAG 4609 KLV metadata

CONTACT

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