



DRONE VOLT®

HELIPLANE LRS

RANGE OF LONG ENDURANCE VTOL DRONES



2.5 h
Max flight time



100 km
Max HD video feed
transmission



Cloud option
LTE Transmission (4G/5G)

The ultimate solution for 3D mapping and Aerial surveillance

Heliplane LRS is a professional VTOL drone that combines the advantages of a multirotor drone with those of a fixed-wing UAV. The transition between the two flight modes frees up take-off and landing runways. Equipped with high definition thermal and optical cameras, it is the ideal tool for day and night surveillance missions.

- **Enduring** : The Heliplane LRS can achieve 150 minutes of flight time and reach 80 km distance. (with the Pro Version)*
- **Stable** : Its light and robust structure gives it great stability and resistance to winds up to 50 km/h (13,8 m/s).
- **Rapid deployment** : Assembly of the VTOL in less than 1 min and without tools. Vertical takeoff and landing.
- **Polyvalent** : Choice between a camera payload or a compartment for the delivery of material (medicines, tools, etc). Easy payload change.
- **Available in 3 sizes** : 240 cm, 340 cm and 410 cm (Beluga)



THE PRO VERSION : AN INCREASED TRANSMISSION



Rugged ground station
with dual screen



Relay antenna tracker :
50 km / 80 km

OU



Relay antenna tracker :
100 km

THE CLOUD VERSION : AN UNLIMITED TRANSMISSION**



Reinforced ground station or
computer (PC / Mac OS)



4G/5G Modem
(Sim required)

TYPES OF COMPATIBLE PAYLOADS



CAMERAS



IP CAMERAS



OBLIQUE CAMERAS



LIDAR



MULTISPECTRAL

APPLICATIONS



SAFETY / SURVEILLANCE

- RISK AND LOSS MAPPING
- PERIMETER SURVEILLANCE (BORDERS, COASTLINE...)
- FIRE MONITORING
- SEARCH & RESCUE MISSIONS
- MONITORING INDUSTRIAL SITES AND WORKSITES



QUARRIES / MINES / FOREST EXPLOITATION

- FIELD SURVEYS FOR STOCK MANAGEMENT
- WORK MANAGEMENT / SIZE FRONTS
- RISK SIMULATION
- CREATION OF 2D PLANS AND 3D RECONSTRUCTION



ENERGY INFRASTRUCTURE INSPECTIONS

- SOLAR POWER PLANTS, WIND TURBINES, OFFSHORE PLATFORMS, PIPELINES, POWER GRID



CIVIL ENGINEERING

- DIGITAL MODEL OF ELEVATION, TERRAIN AND SURFACE (DEM, DSM, DTM)
- BIM MODELS



AGRICULTURE

- DIAGNOSIS OF AGRICULTURAL PLOTS (WATER STRESS, VEGETATION INDEX)
- TOPOGRAPHY

(*) Depending on the options chosen, the environment and the flight conditions. Radio LOS (Line of Sight).

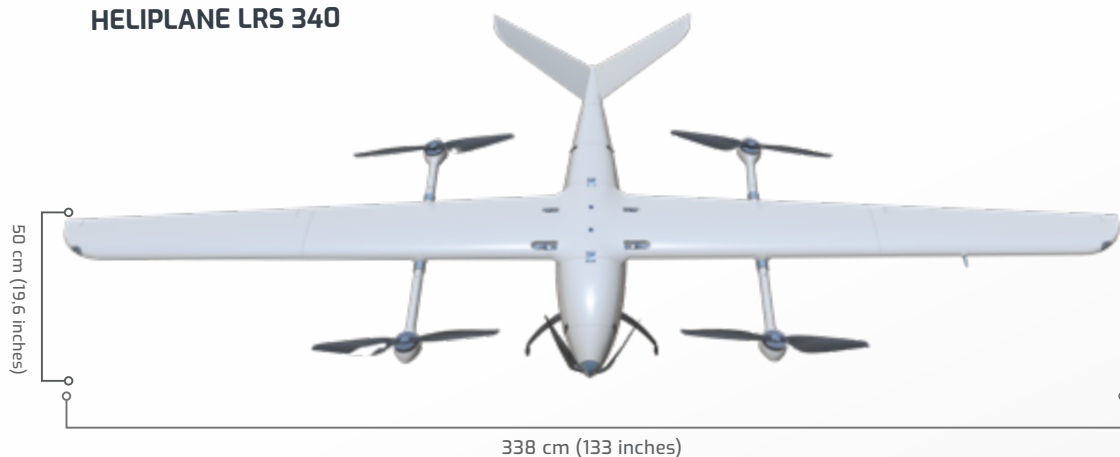
(**) Depending on 4G/5G coverage and an Internet connection for the PC/MAC.

FEATURES

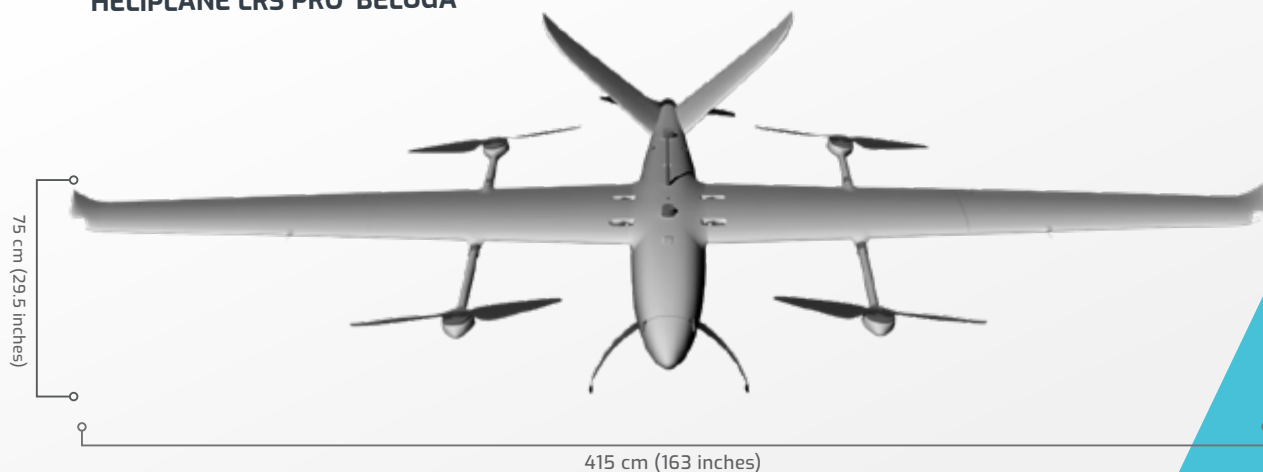
HELIPLANE LRS 240



HELIPLANE LRS 340



HELIPLANE LRS PRO 'BELUGA'



REMOVABLE AND ULTRA TRANSPORTABLE SYSTEM

The Heliplane LRS is equipped with connectors allowing the rapid assembly and disassembly of the wings and tailplane without tools, for easy transport in a case.

AIRCRAFT SPECIFICATIONS

HELIPLANE
LRS

HELIPLANE
LRS PRO

HELIPLANE
LRS PRO 'BELUGA'

AIRCRAFT

Dimensions
Flight case
ADS-B

WEIGHT

Weight (without battery)
Maximum take-off weight (MTOW)
Maximum payload weight

REMOTE CONTROLLER

Range L.O.S (Radio line of sight)

BATTERIES

Quantity
Capacity

PROPELLERS

Diameter

ONBOARD GNSS

Constellation

SPEED (Depending on the payload)

Cruise speed *depending on the payload
Max speed (Vne)
Wind resistance

TEMPERATURE

FLIGHT LIMIT

Max flight height (ASL)
Max Distance (no payload)

FLIGHT TIME

Max flight time (without payload)
Max flight time with H30T
Max flight time with Sony RX1R2 42MP
Max flight time with Sony α7R IV 61MP

MATERIAL

Structure

METEO

Moderate rain (flight not recommended in rain)

PAYLOADS

Other payloads, contact us



	HELIPLANE LRS 240	HELIPLANE LRS 240 PRO	HELIPLANE LRS 340	HELIPLANE LRS 340 PRO	HELIPLANE LRS PRO 'BELUGA'
	240(L) x115(l) x 30(h) cm 130(L) x 50(l) x 50(h) cm Included	240(L) x115(l) x 30(h) cm 130(L) x 50(l) x 50(h) cm Included	338(L) x150(l) x 50(h) cm 138(L) x 65(l) x 50(h) cm Included	338(L) x150(l) x 50(h) cm 138(L) x 65(l) x 50(h) cm Included	415 (L) x 195 (l) x 75 (h) cm 158 (L) x 65 (l) x 77 (h) cm Included
	4,65 kg 8 kg 1 kg	4,65 kg 8 kg 1 kg	9,5 kg 18 kg 3 kg	9,5 kg 18 kg 3 kg	15,5 kg 33 kg 10 kg
	2,4 GHz - 3 km	800MHz - 50 km or 80 km (L.O.S) 1.4GHz - 50 km or 80 km (L.O.S) 2,4GHz - 100 km (anti-jamming system) Cloud LTE (4G/5G)	2,4 GHz - 3 km	800MHz - 50 km or 80 km (L.O.S) 1.4GHz - 50 km or 80 km (L.O.S) 2,4GHz - 100 km (anti-jamming system) Cloud LTE (4G/5G)	800MHz - 50 km or 80 km (L.O.S) 1.4GHz - 50 km or 80 km (L.O.S) 2,4GHz - 100 km (anti-jamming system) LTE (4G/5G)
	1 27 000 mAh	1 27 000 mAh	2 30 000 mAh	2 30 000 mAh	2 or 4 30 000 mAh
	14 inches	14 inches	22 inches	22 inches	26 inches
	GPS L1/L2, GLONASS G1/G2, BeiDou B1/B2, Galileo E1/E5b	GPS L1/L2, GLONASS G1/G2, BeiDou B1/B2, Galileo E1/E5b	GPS L1/L2, GLONASS G1/G2, BeiDou B1/B2, Galileo E1/E5b	GPS L1/L2, GLONASS G1/G2, BeiDou B1/B2, Galileo E1/E5b	GPS L1/L2, GLONASS G1/G2, BeiDou B1/B2, Galileo E1/E5b
	20 to 25 m/s (72 to 90 km/h) 33 m/s (119 km/h) 12 m/s (43 km/h)	20 to 25 m/s (72 to 90 km/h) 33 m/s (119 km/h) 12 m/s (43 km/h)	20 to 25 m/s (72 to 93,6 km/h) 35 m/s (126 km/h) 13.8 m/s (50 km/h)	20 to 25 m/s (72 to 93,6 km/h) 35 m/s (126 km/h) 13.8 m/s (50 km/h)	24 to 29 m/s (86 to 104 km/h) 40 m/s (144 km/h) 15 m/s (54 km/h)
	-10° C / +50° C	-10° C / +50° C	-10° C / +50° C	-10° C / +50° C	-10° C / +50° C
	4000 meters 100 km	4000 meters 100 km	4000 meters 160 km	4000 meters 200 km	4000 meters 175 km
	100 minutes / 90 minutes 80 minutes	100 minutes / 90 minutes 80 minutes	150 minutes 110 minutes 135 minutes 130 minutes	150 minutes 110 minutes 135 minutes 130 minutes	140 minutes 120 minutes 130 minutes 130 minutes
	Carbon composite and fiber glass	Carbon composite and fiber glass	Carbon composite and fiber glass	Carbon composite and fiber glass	Carbon composite and fiber glass
	IP46	IP46	IP46	IP46	IP46



Delivery
compartment



Viewpro
A10TR Pro



Sony α7R IV &
Sony ILX-LR1



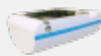
Viewpro
Z10TIR Mini



Topodrone
P61



YellowScan
Mapper+ OEM



Delivery
compartment



Viewpro
H30T



Viewpro
A40T



Topodrone
LiDAR 200+



Share
1025 pro V2



YellowScan
Mapper+



YellowScan
Explorer



YellowScan
SurveyorUltra V3



YellowScan
Voyager*

*BELUGA Only

The aircraft speed, flight time, and maximum distance flight depend on the payload, the environment and the flight conditions.



INCLUDED



GROUND STATION SPECIFICATIONS

SYSTEM

Dimensions	355 (L) x 282(l) x 80(h) cm
Weight	5980 g
CPU	Intel i7 8565U
RAM	8 Go (standard), 32 Go max
Operating System	Win10/Linux
Battery lifetime	3.5h
Battery capacity	16.8V/13600 mAh (external battery also supported)
Storage capacity	128 Go SSD (standard), 1T max
Network interface	WIFI / Bluetooth / 4G (optional)
Softwares	Mission Planner / Viewlink

DISPLAY

Multi-touch screen 1	13.3 inches, 1920*1080, 1000CCD
Multi-touch screen 2	12.1 inches, 1280*800, 1500CCD
Output	R5232 (x4), USB 3.0, LAN, HDMI in, VGA out, Hi-fi
SBUS Port	SBUS IN (x1), SBUS OUT (x2)

ONBOARD GNSS (x2)

Constellations	GPS L1/L2, GLONASS G1/G2, BeiDou B1/B2, Galileo E1/E5b
----------------	--

FREQUENCY

Operating frequency	800MHz/902-920MHz 1.4 GHz/2.3 GHz/2.4 GHz/2.5 GHz
Latency	30 ms

CONTROL

Diameter	22 inches
Auxiliary channel Main joysticks	2
Auxiliary channel Secondary joysticks	4
RF power	0.1 - 1 w (Adjustable)
Customizable buttons	12



INCLUDED



OR

RELAY ANTENNA SPECIFICATIONS

ANTENNA

Frequency	800 MHz / 1.4 GHz / 2.4 GHz
SWR	<1.8
Polarisation mode	Vertical
Dimensions	260*260*40mm
Material	ABS
Humidity	10% - 95%
Weight	4 kg
Power	11V at 16V, 35/45
Consumption	<20 W

COMMUNICATION PROTOCOL

Autopilot	Mavlink
Remote control	SBUS
Ground Station	433MHz/2.4G/5,8G

TRACKING CAPABILITY (50km version only)

Max. horizontal rotation speed	300°/s
Max. vertical rotation speed	60°/s
Max horizontal angle	Unlimited
Max vertical angle	-15° / 135°
Horizontal tracking error	<0.5°
Vertical tracking error	<0.1°



INCLUDED



OR

VIDEO AND DATA TRANSMISSION SPECIFICATIONS

SYSTEM

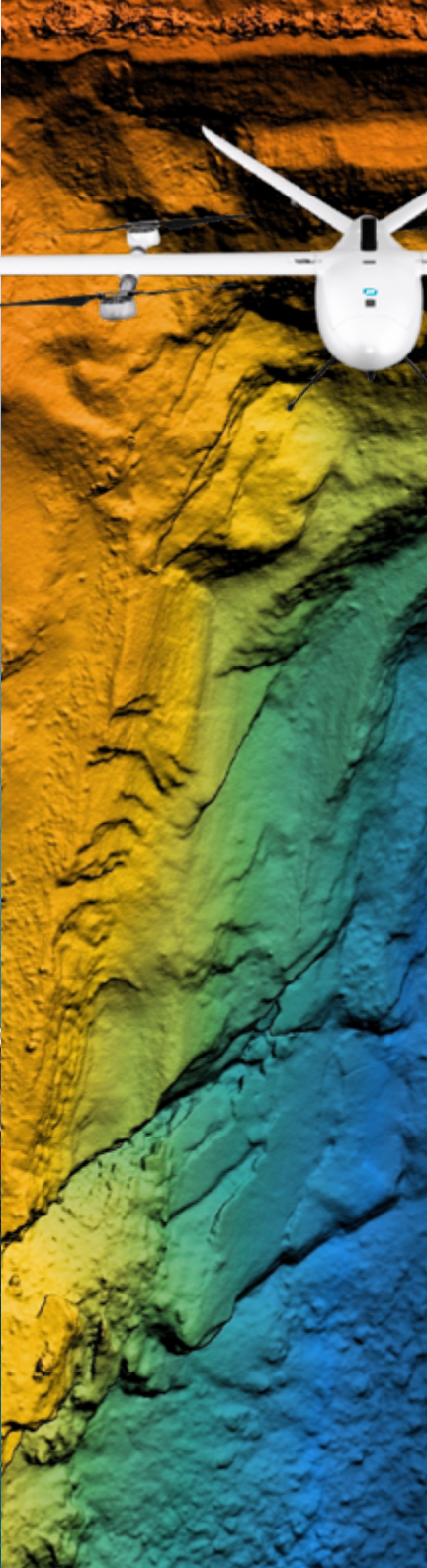
Dimensions	112*63.5*19mm
Weight	143g
Temperature	-40°C ~ +70°C
Humidity	5~95%
Material	ABS
Humidity	10% - 95%
Power	DC 9 ~ 28V (Battery 3 ~ 6S)

ANTENNA

Interface	SMA
Type	Air: Stick Antenna 20cm Ground: Relay Antenna

PERFORMANCE

Frequency band	100 km : 2.4GHz Anti-jamming system Mesh system 80 km : 800MHz / 1.4GHz 50 km : 800MHz / 1.4GHz / 2.4GHz
Bandwidth	5/10/20 MHz
EIRP	33 dBm
Bit rate	30Mbps@20MHz
Sensitivity	≤ -92 dBm



DRONE VOLT®

14, RUE DE LA PERDRIX, LOT 201
93420 VILLEPINTE
FRANCE

CONTACT

+33 1 80 89 44 44
contact@dronevolt.com

GICAT
MEMBER

WWW.DRONEVOLT.COM



Our drones are based on more sustainable electrical technology. They generate 0% CO2, in use, and thus help reduce the environmental impact of our partners.