



GT100 GYROTRAK

 GT100H GYROTRAK

 GT200H GYROTRAK



 **AIRIAL ROBOTICS**
THE NEXT GENERATION OF UAVS

Distributed by:





GT20/GT25

GT100

■ THE GYROTRAK SYSTEM

The commercial UAVs, known as Gyrotrak, are based on the safest aviation principle, the gyrocopter.

We interpreted this principle in a new and modern way by adding the capabilities for vertical take off, landing and hovering. The result is a system with embedded using the advantage of the autorotation principle. This new concept is based on a

design for minimized power consumption resulting in long flight times, long-range operation and high payloads.

The system architecture is designed around multi level redundancies to ensure safe operation under challenging conditions.

The system is scalable in size between MTOW of 4kg up to 600kg systems and

modular allowing a broad spectrum of mission to be flown and payloads to be integrated. It is equipped with the Mil grade Autopilot Veronte 4X by Embention ensuring the best potential performance of the system.

The Gyrotrak system is a great solution for BVLOS operation 24/7 in all weather conditions over obstructed areas.

TECHNICAL SPECIFICATIONS

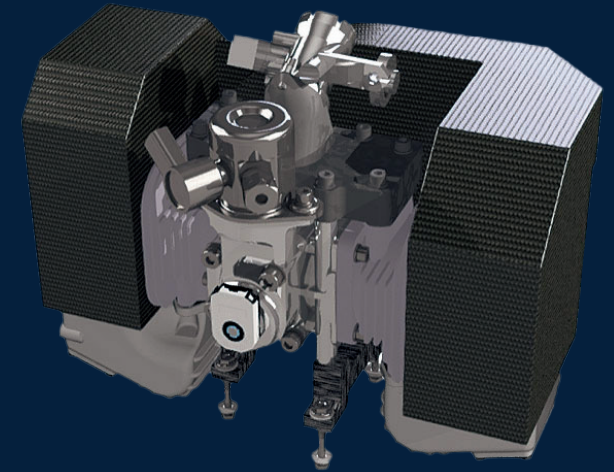
GT100 is available with a full electric drive or in a hybrid version (GT100H) featuring the HGU14 Hybrid multi-fuel generator

for flight times of more than 8h. GT200H with a MTOW of 200 kg exclusively comes with a hybrid drive.

	GT100	GT100H	GT200H
Max. Take Off Weight	100kg (220lbs)	100kg (220lbs)	200kg (440lbs)
Empty Weight	38kg (84lbs)	55kg (121lbs)	110 kg (242lbs)
Dimensions (LWH)	3562*2625*1205mm (140*103*47.5")	3562*2625*1205mm (140*103*47.5")	4000*2700*1200mm (157*106*47")
Max. Speed	160km/h	160km/h	150km/h
Cruise Speed	70km/h	70km/h	80km/h
Max. Payload	62kg (137lbs)	45kg (99lbs)	90kg (198lbs)
Flight Time	30 Minutes with 30kg (66lbs) payload	8,25h with 4kg (9lbs) payload	Up to 6h
Power Plant	Full electric, double redundant	Hybrid, double redundant	Hybrid, double redundant
Navigation	INS, GPS, GLONASS	INS, GPS, GLONASS	INS, GPS, GLONASS
Flight Control System	Veronte Autopilot	Veronte Autopilot	Veronte Autopilot 4X

HGU14 Hybrid Generator

High Efficiency – Low Consumption – Light Weight
We specifically designed this hybrid multi-fuel Gyrotrak generator unit for long endurance and heavy fuel operations.



ENGINE UNIT

- 2-stroke 2-cylinder boxer engine
- 136cc cylinder volume
- Direct injection & port fuel injection
- Extra lean burning conditions
- Multi-fuel applications including heavy fuel
- Dry-sump lubrication system
- Electronic variable ignition
- Forced air cooling

ALTERNATOR UNIT

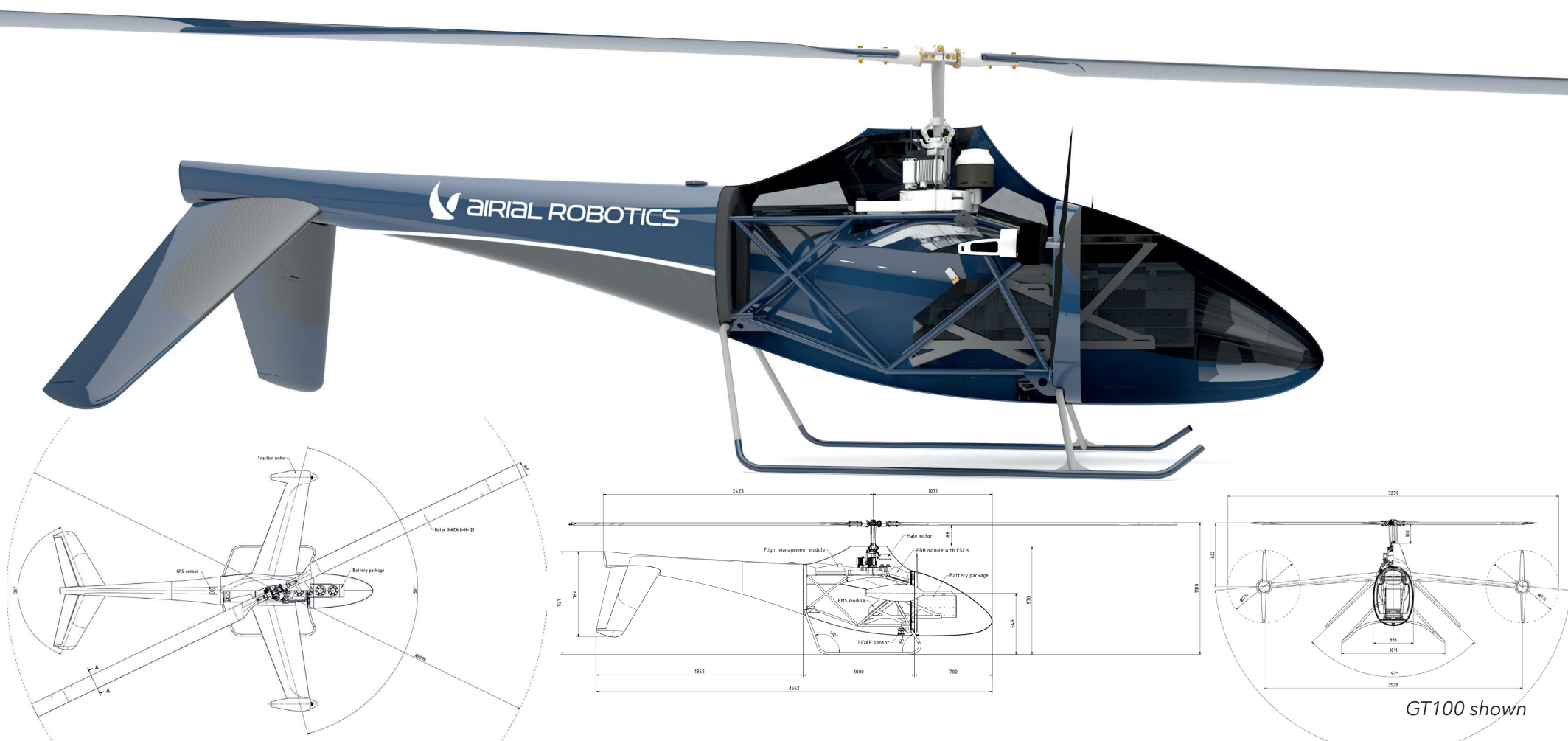
- Direct drive brushless motor
- 60-90 VDC System voltage
- 14kW peak power, 8kW continuous power
- CAN communication with BMS

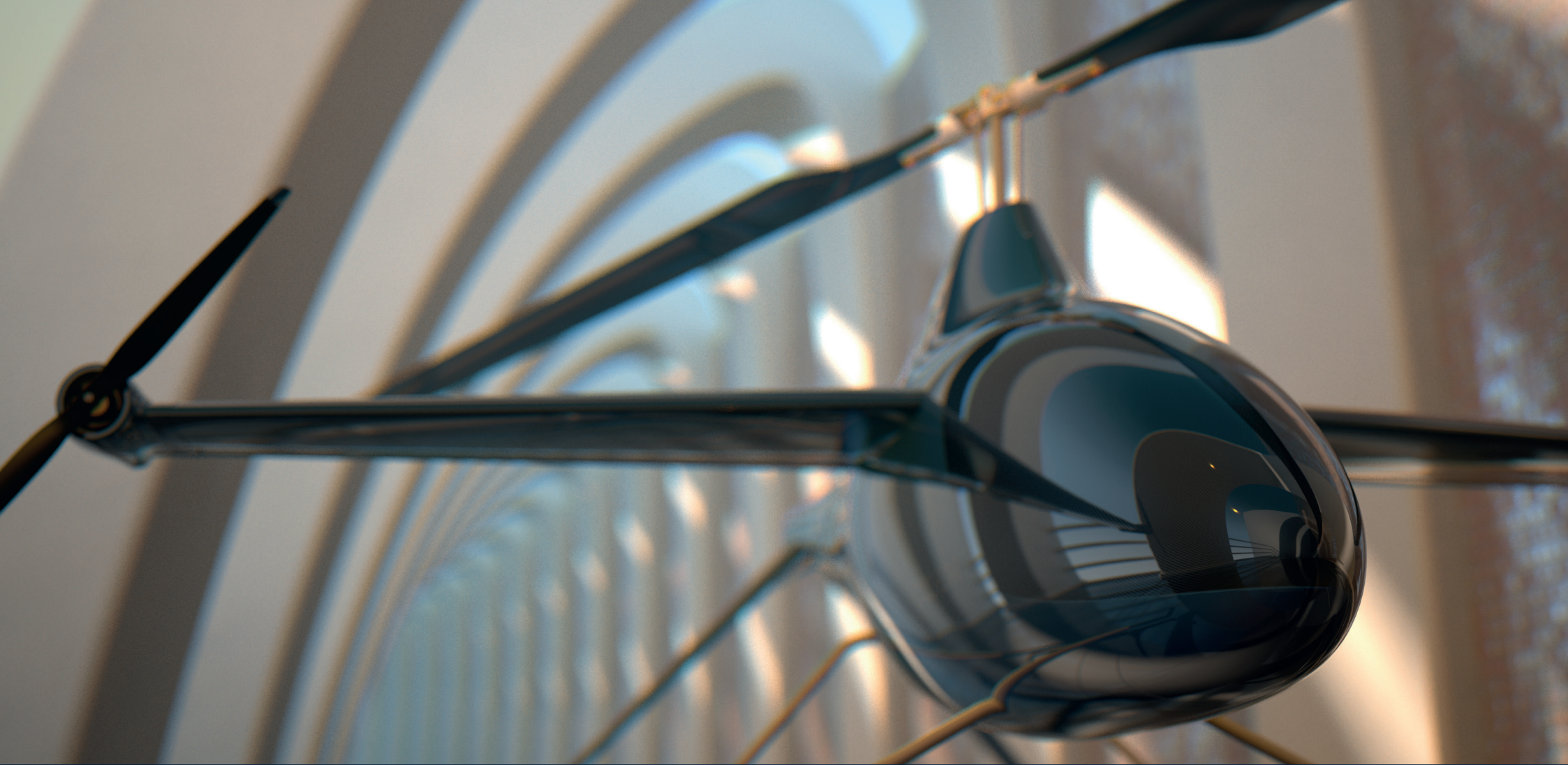
GT100 | GT100H | GT200H COMMERCIAL UAVs

The GT100/200 UAV system is designed for high payload and/or long endurance missions for multiple applications. It can be equipped with state of the art DAA technology like airborne Radar systems, ADSB and FLARM. The systems aim at the surveillance market carrying

even heavy payloads like a MX10 camera system or larger high precision LIDAR systems. The system provides a high capacity of payload in the field of agriculture. And in the field of transport there is the choice for the operator to go for range and mul-

multiple take off and landings in an autonomous mission or for payload based on mission profile and system configuration. These system are ideal to replace several mission types flown today by manned helicopters. The economic advantages are huge.





SAFETY FIRST

■ AVIATION GRADE QUALITY

Our guideline is to provide solutions for products, services and support following aviation standards. It is our mandate to offer safety and reliability at all levels of commercial UAV operation.

■ AUTOROTATION

One of the most striking safety features of Gyrotrak is its ability to autorotate. Since the main rotor is in autorotation mode during forward flight, Gyrotrak is able to land slowly and safely, even in the event of a motor failure.

■ REDUNDANCY

Gyrotrak's multiple levels of redundancy ensures continued flight even in the unlikely event that one of the systems fails.

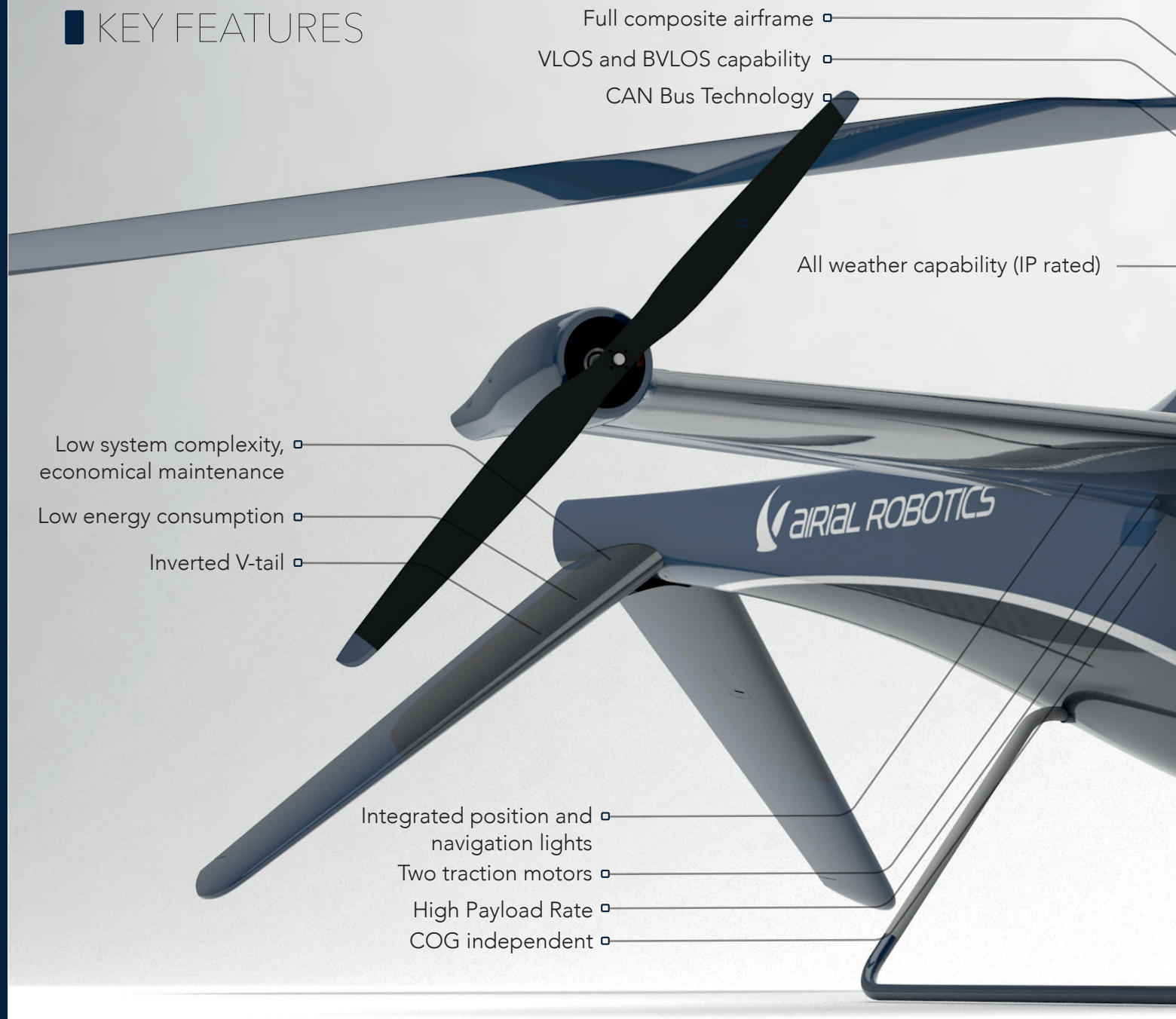
■ CERTIFIED AUTOPILOT

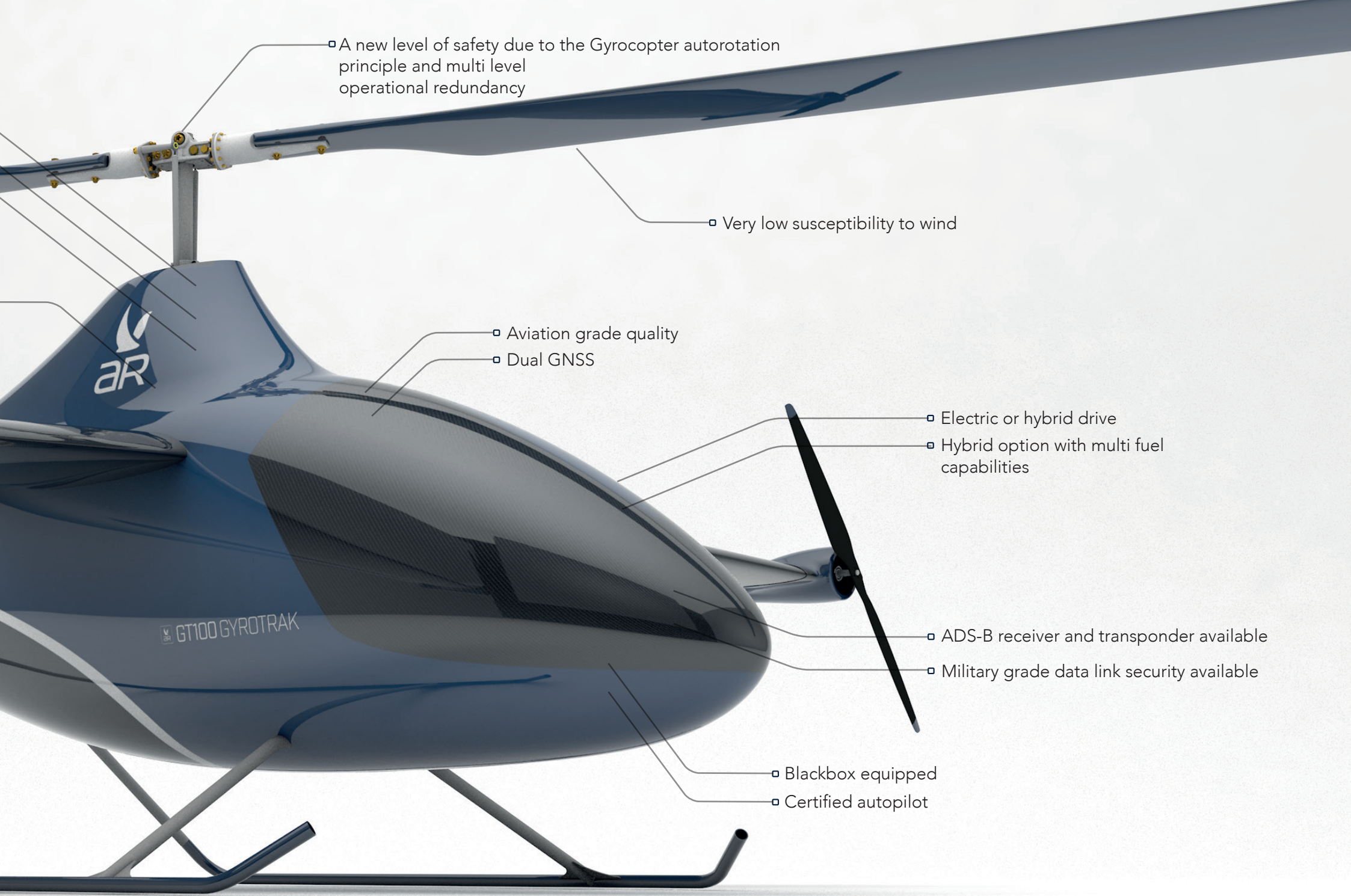
The larger Gyrotrak UAV systems are equipped with the triple redundant Veronte Autopilot 4X. The system is DO178/ED-12 and D254 certified – the most demanding aeronautical regulations of onboard electronics - offering the highest level of reliability.

■ SAFETY & SECURITY

The system is equipped with permanent continuous health monitoring, a black box and EMI protection. All communication links are encrypted – a higher, military grade encryption is optional.

■ KEY FEATURES





▫ A new level of safety due to the Gyrocopter autorotation principle and multi level operational redundancy

▫ Very low susceptibility to wind

▫ Aviation grade quality

▫ Dual GNSS

▫ Electric or hybrid drive

▫ Hybrid option with multi fuel capabilities

▫ ADS-B receiver and transponder available

▫ Military grade data link security available

▫ Blackbox equipped

▫ Certified autopilot



CONTACT

Canadian Representative Office:

IN-FLIGHT Data Inc.
 2 Winters Way
 Okotoks, AB T1S 0E4

Phone: (403) 512 8805
info@inflightdata.ca



	GT100 / GT100H	GT200H
Flight Envelope	Speed Range 0-160km/h Top Ceiling: 27.000ft Max Range 130km (electric), 450km (hybrid)	Speed Range 0-150km/h Top Ceiling: 27.000ft Max Range: 450km
Operational Conditions:	Temperature: - 20°C - 40°C (-4°F - 104°F) Wind: Up to 9Bft 49kts 25m/s 90km/h 56mph	Temperature: - 20°C - 40°C (-4°F - 104°F) Wind: Up to 9Bft 49kts 25m/s 90km/h 56mph
Precision Level	+/- 10cm	+/- 10cm
Maximum Payload	62kg (Electric Version) 45kg (Hybrid Version)	90kg
Maximum Flight Time	Flight times between 30 minutes and 8.25h based on power system	Up to 6h