



2.5 kg
 Swapable payload compartment

150 km+
 Maximum travelled distance

PPK/RTK
 Improve absolute accuracy in fewer steps

<5 min
 Quick assembly

5G
 5G & Cloud connectivity

Auto MISSION
 Take-off, landing & smart autonomous features

INSEE - 340

eVTOL Fixed-Wing UAV

Large area Mapping & Surveillance

THE ULTIMATE SOLUTION OF FLIGHT

INSEE-340 Hybrid eVTOL is a high-performance Vertical Takeoff and Landing (VTOL) UAV designed for aerial surveying, mapping, surveillance, and professional applications. Optimized aerodynamic design with winglet, dihedral V-tail, and more to meet the advanced concept of high flight stability & quality, long endurance, and multiple payloads with modular payload bay design. Composite materials which feature high strength and lightweight allow the UAV to maintain flight performance under extreme environmental conditions. INSEE-340 can stay in the air longer than 2 hours coming with a traveled distance further than 150 km.

UAV SPECIFICATIONS

Performance parameter	INSEE-340
Airframe material	Carbon fiber & Fiberglass
Wingspan & Fuselage Length	3.4 & 1.5 m
Maximum Takeoff Weight	18 kg
Maximum Payload Weight	2.5 kg
Maximum Flight Time	2.5h to 3h
Maximum Travelled Distance	150 to 200 km
Optimised Cruising speed	21 to 23 m/s
Maximum Cruising speed	28 m/s
Maximum Ascent & Descent speed	4 & 7 m/s
Wind Resistance during Takoff and Landing (VTOL)	10.8 m/s
Wind Resistance during Cruising (Fixed-Wing)	13.6 m/s
Maximum Flight Altitude	4500 m
Carrying case (W x L x H)	58x155x65 cm

ICS Autopilot & Mission Computer



- Triple redundancy industrial grade IMU and compass
- Dual Multiband GNSS RTK receiver with "GNSS as yaw heading" feature
- Dual airspeed sensor with fault detection and Isolation algorithm
- Industrial grade connector for excellent shock and thermal resistance
- Propulsion: ESC health monitor, smart battery, full gimbal & payload control
- Mission computer for AI-powered feature and 5G connectivity for real-time video streaming and Telemetry datalink

FlightLync The Ground Control Software



- Monitor various flight parameters and UAV systems, notify, and advise on the most appropriate action
- Real-time video feed is integrated into the flight monitoring screen
- Intuitive mission deployment and execution
- Flight planning tool provides Corridor survey, area survey, structure scan, and more
- Camera parameters and gimbal orientation settings to meet a variety of survey mapping needs
- Custom base map (Orthomosaic, High-resolution map)
- Import KML and Shapefile to create a flight plan
- Telemetry datalink and video streaming over 4/5G

MAPPING & SURVILLANCE



Orthomosaic mapping

- Smart city planning
- Infrastructure
- Road /Railway construction



Digital Elevation & Terrain model

- Irrigation management
- Infrastructure
- Mining and stockpile analysis



Multispectral Imaging

- Crop yield prediction
- Crop health monitor
- Variable rate fertilization



Real-time video monitoring

- Urban security
- Border patrol
- Wildlife monitor

