



# INSEE 250

INNOVATE BEYOND LIMITS

A safe automation flight experience  
with INSEE.



Wingspan  
2500mm



Flight time  
120-180min



Flight radius  
20-150KM



Maximum load  
2KG



Maximum speed  
108KM/H



Celling height  
4800M



Stall protection  
redundancy



Altimeter  
Soft landing

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# INSEE-250

INSEE-250 Electric VTOL UAV is a game-changer in the world of unmanned aerial vehicles. With a 2.5hrs flight time (with 1kg payload) and a 2500mm wingspan, it's an ideal tool for long-range surveillance, aerial mapping, and search and rescue missions. This drone's advanced technology and capabilities make it the ultimate tool for professional drone operators. Order now to experience the future of UAVs!

Type	eVTOL fixed wing	Flight Distance	180-270 km
Color	White color as default (support customization)	Max Cruising Speed	108km/h (30m/s)
Wingspan	2500mm	Min Cruising Speed	72km/h (20m/s)
Length	1260mm	Max Flight Altitude	4800m
Belly to Ground	160mm	Max Wind resistance	14m/s (fixed wing), 8m/s (VTOL)
Battery compartment size	26*15*9cm	Battery (Recommended)	2 * 6S 25000-28000mAh HED Li-ion
Material	Carbon fiber + fiberglass	Working Temperature	-20°C~60°C
MTOW	14kg(included batteries)	IP Grade	IP45
Max Payload	2kg	Frequency	2400-2500 MHz / Customize
Flight time	2.5hrs (1kg payload) / 3hrs (no payload)	Transmission Power (EIRP)	20dBm.

## Multi-Sensor Payload



Oblique Camera  
Riebo D2M



Medium Format  
Camera  
Riebo R10P



Full Frame Camera  
Sony ILX-LR1



Laser Scanner (LiDAR)  
YellowScan - Mapper+ OEM, Surveyor Ultra 3 OEM  
CHCNAV - AlphaAir 10  
GreenValley International - LiAir H600



Multispectral Camera  
Micasense  
RedEdge-P, Altum-PT

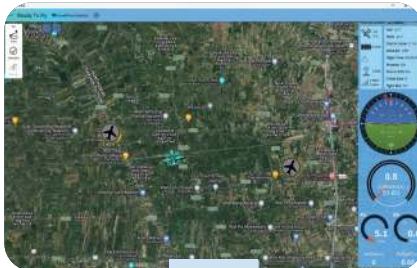
## Ground Station INSEE-GCS-1 / INSEE Pilot



Display  
10-15 inch

CPU  
Intel Core™ i5-i7

Memory  
16GB RAM



**The INSEE-GCS** Ground Station is highly customizable, enabling users to adjust features such as display size (10-15 inches), CPU (Intel Core™ i5/i7), memory (up to 16GB), battery capacity (up to 10 hours), contrast ratio (1000:1), brightness (1000cd/m<sup>2</sup>), refresh rate (60Hz), and IP55 protection. It also offers optional touchscreen functionality to suit specific needs.

The system integrates with **INSEE Pilot** software, offering a user-friendly interface for clear parameter monitoring. It also includes ADS-B functionality, enabling the reception of positional data from certain commercial aircraft for enhanced situational awareness.

## Typical mission parameters

for YellowScan Mapper+ OEM and Surveyor Ultra 3 OEM

### ▶ YellowScan Mapper+ OEM (FOV 70.4° x 4.5°)

FLIGHT SPEED	FLIGHT HEIGHT	POINT DENSITY
23 m/s	100 m AGL	75 pts/m <sup>2</sup>
23 m/s	150 m AGL	50 pts/m <sup>2</sup>
27 m/s	100 m AGL	64 pts/m <sup>2</sup>
27 m/s	150 m AGL	42 pts/m <sup>2</sup>
30 m/s	100 m AGL	57 pts/m <sup>2</sup>
30 m/s	150 m AGL	38 pts/m <sup>2</sup>

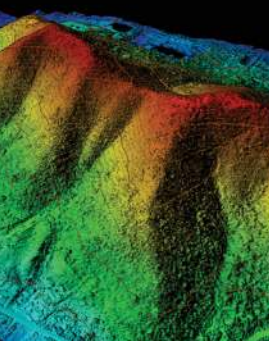
### ▶ YellowScan Surveyor Ultra 3 OEM (FOV 120° x 40.3°)

FLIGHT SPEED	FLIGHT HEIGHT	POINT DENSITY
23 m/s	100 m AGL	27 pts/m <sup>2</sup>
23 m/s	150 m AGL	18 pts/m <sup>2</sup>
27 m/s	100 m AGL	23 pts/m <sup>2</sup>
27 m/s	150 m AGL	15 pts/m <sup>2</sup>
30 m/s	100 m AGL	21 pts/m <sup>2</sup>
30 m/s	150 m AGL	14 pts/m <sup>2</sup>

Mapper+ OEM

Surveyor Ultra 3 OEM

## Application



Mapping & Surveying

Power Line Inspection

Forest Research & Rescue

Smart City

# Typical pointcloud snapshots.



## INSEE-250 eVTOL Fixed Wing

- ▶ Platform: YellowScan Ultra 3 OEM ◀
- ▶ Area Coverage: 0.35 sq km ◀
- ▶ Flight height: 100 m AGL ◀
- ▶ Speed: 23 m/s ◀
- ▶ Flight time: 15 min ◀



## INSEE-250 eVTOL Fixed Wing

- ▶ Platform: YellowScan Mapper+ OEM
- ▶ Area Coverage: 1.4 sq km
- ▶ Flight height: 100 m AGL
- ▶ Speed: 23 m/s
- ▶ Flight time: 40 min

