

POLARIS

By Evolunar

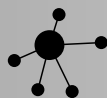
Autonomous Navigation System



Plug and play



GNSS-independent



Real-time 3D
mapping



Autonomous waypoint
generation



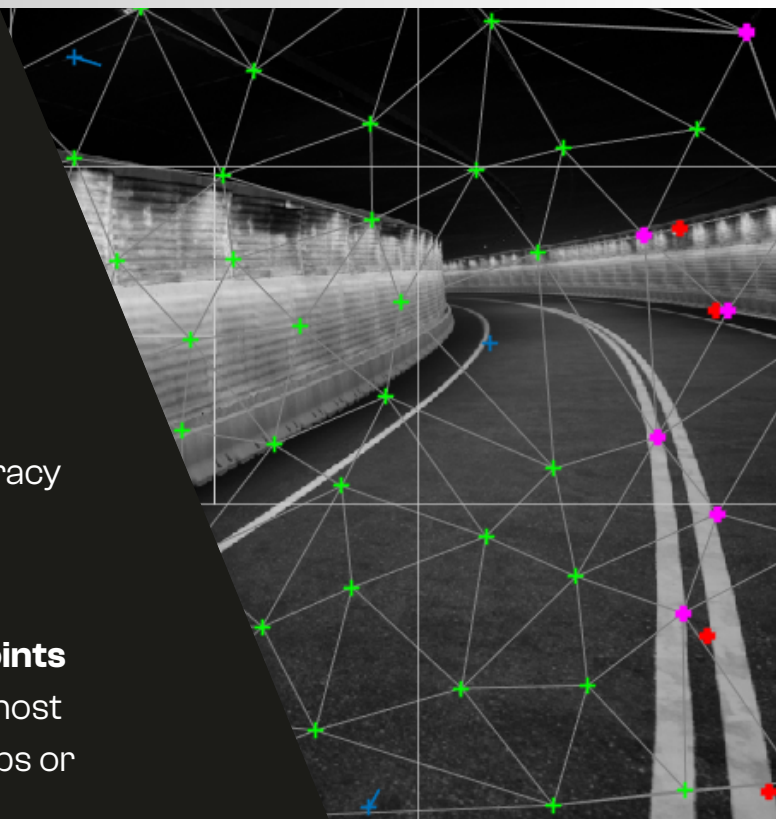
Unlock True UAV Autonomy

From confined spaces to open skies

Enable your drone to navigate autonomously both **indoor** and **outdoor** with **POLARIS**, a plug-and-play module ready to install on any aerial platform.

Fly with or without GNSS, even in environments subjected to jamming and spoofing, leveraging unprecedented accuracy thanks to our proprietary and cutting-edge algorithms.

Generate **real-time 3D maps** and **waypoints** to autonomously guide UAVs across the most complex scenarios, with no preloaded maps or auxiliary equipment required.



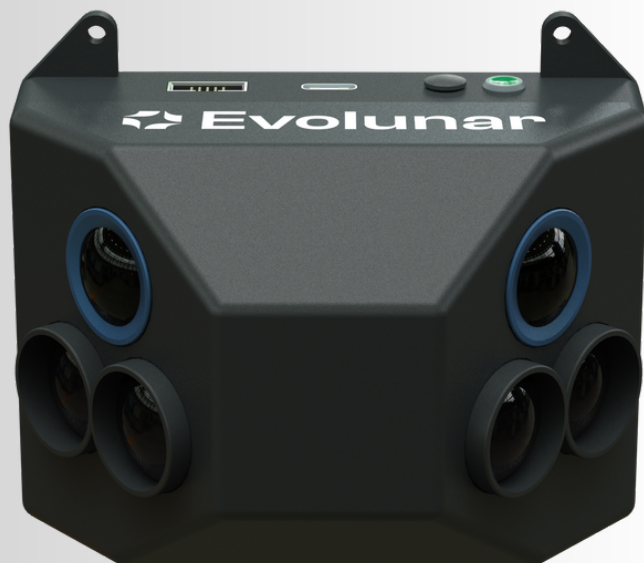
Features & Functionality

Unlock true autonomy with POLARIS, a fully **self-contained** navigation module designed to **retrofit any UAV**. POLARIS fuses its sensor data to determine the vehicle's position, velocity, and attitude with unrivaled accuracy, enabling reliable operations without limits.

In addition to generating waypoints for **autonomous flight**, POLARIS ensures stable manual control, provides smart Return-to-Home capability and allows trajectory following.

Its live 3D mapping enables precise spatial referencing of payload data even in the most extreme scenarios.

Powered by our **patent-pending algorithms**, POLARIS extends your operational capabilities where GNSS can't reach.



Operational Scenarios



Indoor
Inspections



Outdoor
Inspections



Factories



Search &
Rescue



Security &
Defence



Urban
Canyons



Warehouses



Delivery

Technical Specs

Weight

< 250g

Size

10x7x7 cm

Power

< 8 W

Data Interface

MavLink

DJI SDK

NMEA

Navigation Drift

Relative mode: < 0.5%

Absolute mode: No drift

Sensor suite

1x IMU

2x Visual cameras

2x Laser rangefinders

Custom solutions can be tailored to specific needs