

Orbital systems  
Satellites  
Transversal competencies



## PRESENTATION OF THE COMPANY

Infinite Orbits (IO) is a New Space Deep Tech start-up founded by graduates from ISAE-Supaero, INSEAD, Stanford and Columbia universities, whose business is to develop and commercialize products and services for the in-orbit Space market. The R&D work carried out within the company, with the help of the Space Rendez-vous Laboratory at Stanford, is mainly based on artificial intelligence (machine learning, computer vision) and GNC (guidance, navigation, and control).

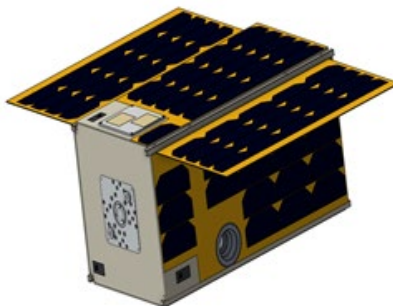
## COMPETENCIES & CAPABILITIES

Infinite Orbits is positioned in an orbiting services market under construction to develop in-orbit services using proprietary autonomous navigation & docking technology.

It operates in the following topics: Debris detection and collision avoidance, Space situational awareness (SSA) & traffic management, Rendezvous & proximity operations, GEO satellite inspection, Spectrum preservation of orbital slots.

Infinite Orbits is differentiated through two main technology streams:

- Designing affordable and reliable highly mobile small sat (ChopeSat)
- Developing vision based autonomous navigation using AI (Orbit Guard)
- Combining both technologies to develop a disruptive life extension offer (Endurance)



“ChopeSat”

ibe sat

# INFINITE ORBITS

## PRODUCTS & SERVICES

Infinite Orbits is delivering affordable in-orbit products and services for autonomous space navigation and rendez-vous, that are the following:

- **“ChopeSat”**: A first of its kind geo grade cube sat to perform Bringing Into Use services (Orbital Spectrum protection). The first version will fly on March 2022 via SpaceX Falco heavy launcher.
- **“Orbit Guard”**: A Space Situational Awareness payload carrying specialized cameras and flight computer to perform in-orbit object detection and autonomous navigation. A first In-Orbit Demonstration is being lab tested and scheduled for first in-orbit mission in 2022. First commercial prototype to be delivered late 2022.
- **“Endurance”**: A life extension servicer satellite to perform Rendezvous and docking operations for geostationary telecom satellites. A baseline study has been performed for identified cases from big space telecom players and firm order for preliminary design project is expected before end of 2021.

## MAJOR SPACE PROJECTS & REFERENCES

IO has signed its first customers in 2019 and is in track to perform its first in-orbit commercial operation and technology in orbit demonstration.

IO main developments and projects include:

- Successfully launch and operate its first commercial Cube satellite (Planned with SpaceX, Feb 2022)
- Validate Autonomous GNC software platform and adapt it to commercial in-orbit applications (e.g., Debris detection and avoidance, chasing targets, etc.)
- Adapt product offering to fit space military services (surveillance of GEO assets).
- Finalize first baseline review of Life Extension project for a major geo satellite operator, before end of 2021.

## POINT OF CONTACT

**ADDRESS** 13, rue Sainte-Ursule, Toulouse, 31000, France

**WEBSITE** [www.infiniteorbits.io](http://www.infiniteorbits.io)

**POINT-OF-CONTACT** : HADDOUD Adel, CEO, [adel@infiniteorbits.io](mailto:adel@infiniteorbits.io)

+33 (0) 760 763 168

**TURNOVER** ~5 M€

**WORK FORCE** 10-15 employees