

Flemish company is looking for clients for Star Trackers and partners that can join the DeDUST project for space debris detection.

Summary

Profile type

Business Offer

Company's country

Belgium

POD reference

BOBE20250121008

Profile status

PUBLISHED

Type of partnership

Commercial agreement

Targeted countries

• **Japan**

Contact Person

[Noriko MITA](#)

Term of validity

21 Jan 2025

21 Jan 2026

Last update

21 Jan 2025

General Information

Short summary

The company is comprised of 95% engineers who get constant formation and training. Therefore, the products are being improved constantly and updated. The company works closely with ESA and uses all kinds of facilities for testing Space Equipment at the University of Leuven; including the use of the telescope in the observatory of La Palma (Spain). They offer unparalleled technical support without extra cost to the clients, who can make sure they will get everything that the products can offer.

Full description

STAR TRACKERS:

The company produces high precision star trackers developed with the European Space Agency and with flight heritage in LEO missions. The client is a company with 95% engineers and not venture backed, therefore they offer well priced high-quality hardware with unlimited hours of technical support.

DEDUST PROJECT:

Satellites use star trackers to identify their position and orientation in space. Conventional star trackers only use the bright blobs (stars) to determine the attitude and position. Using a more modern approach, the clients trackers analyse the full frame of the image 10 times per second, allowing us to also identify space debris as well as provide

positioning and attitude data to the satellite.

Our space debris detection doubles the functions of the star trackers without any extra computational / energy cost. The space debris data can be stored in a first real-time space debris database.

Advantages and innovations

STAR TRACKERS

Our star trackers sell with a lead time of 4 months while offering competitive pricing. They have been developed in collaboration with and according to the European Space Agency standards.

Space Heritage:

In all the missions the star tracker is functional and providing correct quaternions. We are showing here some examples

Customer	ESA	ESA	Commercial	EC	Commercial
Mission	SIMBA	RADCUBE	Commercial	CSC-1	Commercial
Platform	3U CubeSat		6U CubeSat		Microsat

Launched from September 2020 to March 2024

Technical characteristics:

- Cross-boresight accuracy: 2" (1)
- Around-boresight accuracy 10"(1)
- Magnitude <6.2
- FoV 25.4
- Power Consumption 1500 mW
- Coatings and baffle accessories available

DEDUST

For the clients:

The clients are offered the possibility to sell the space debris data captured by our star trackers back to us:

- The space debris data will be in a range of 350-400 Kb per day
- Star trackers can generate a positive revenue stream, decreasing the OPEX of your mission.
- Your satellite becomes part of clean space initiatives
- Pricing and details to be defined based on the mission

Technical benefits:

There are 5 main advantages compared with conventional space debris detection methods done from Earth:

1. No blind spots: From Earth you can't measure space debris travelling above the sea or not above the telescopes.
2. Possibility to detect smaller pieces of debris: Without the atmosphere's distortion they can see debris as small as 1cm of diameter.
3. Cost efficient: There's no extra power consumption or computational consumption, so DeDUST can be performed in all your satellites without changes to your mission
4. Retroactive: It can be activated before or even when your satellites are in space.
5. OTA SW updates: They can ensure the clients have the most up to date software in their satellites.

Technical specification or expertise sought

Stage of development

Already on the market

IPR Status

IPR Notes

Sustainable Development goals

- **Goal 6: Clean Water and Sanitation**
- **Goal 17: Partnerships to achieve the Goal**
- **Goal 9: Industry, Innovation and Infrastructure**

Partner Sought

Expected role of the partner

They are looking for clients that can buy our star trackers and potential resellers in the region.

- The clients can be from small to large companies, R&D centers or public institutions.
- The resellers can be medium to large companies.

Type of partnership

Commercial agreement

Type and size of the partner

- **University**
- **SME 50 - 249**
- **Big company**
- **SME 11-49**
- **R&D Institution**

Dissemination

Technology keywords

Market keywords

- **01005005 - Other satellite/microwave**
- **01005001 - Satellite services/carriers/operators**
- **02006004 - Data processing, analysis and input services**

Targeted countries

- **Japan**

Sector groups involved

Media

PDF documents

[Scorpio Star tracker datasheet V2.1.pdf](#)

1

[Star Simulator datasheet V2.1.pdf](#)

1

[CANVA proof II-AZRKet- DFLI.pdf](#)

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[Sagitta Star tracker datasheets V2.1.pdf](#)

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[Zyra reaction wheel datasheet V2.1.pdf](#)

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[Twinkle star tracker datasheet V2.2.pdf](#)

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