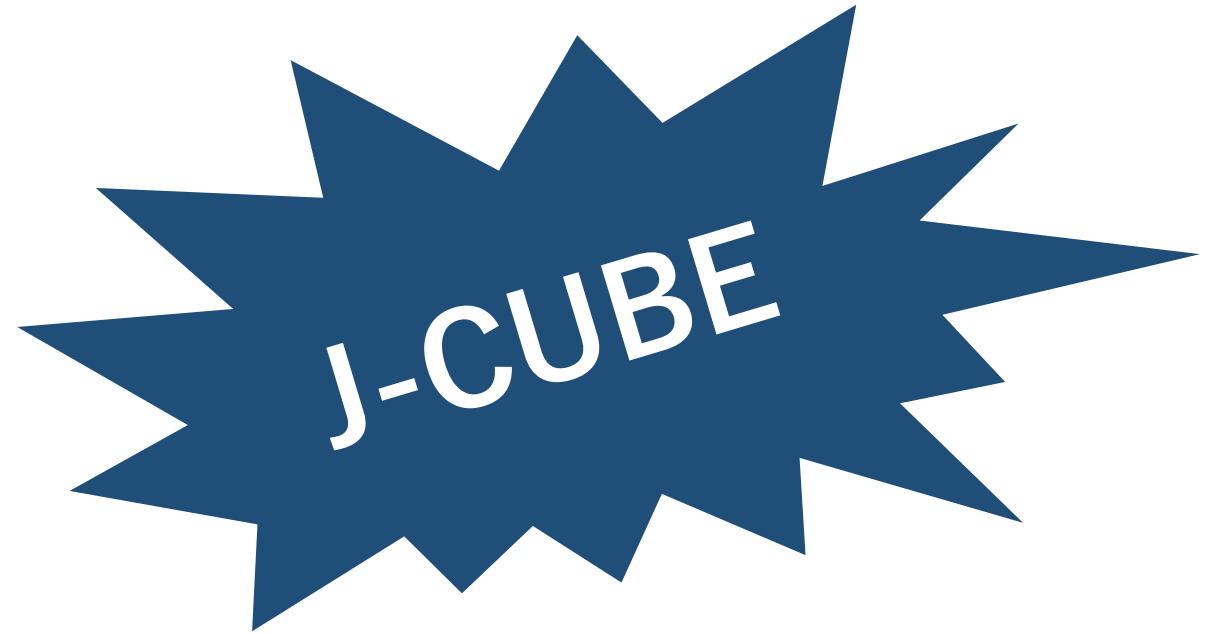




Introducing



UNISEC
University Space Engineering Consortium

A new collaboration between JAXA and UNISEC to help emerging space nations get their first CubeSats deployed into Low-Earth Orbit via the ISS.

*This 9-page document by
G. Maeda, 16 April 2022*

J-CUBE is not to be confused with KiboCUBE

JAXA+UNISEC, low-cost opportunities

The program has two categories:

- ① one is construction of international collaborative relationships,
- ② another is for domestic capacity building.

Both categories require Japanese partners (UNISEC-Japan's universities, institutes, and technical colleges) for small sat development.

J-CUBE winners secure a low-cost launch opportunity 12U/per year (or 6 satellites/per year). The satellite size is assumed to be 1~3U.

J-CUBE:

<http://unisec.jp/serviceen/j-cube>

JAXA+UNOOSA,
zero-cost opportunities



KiboCUBE:

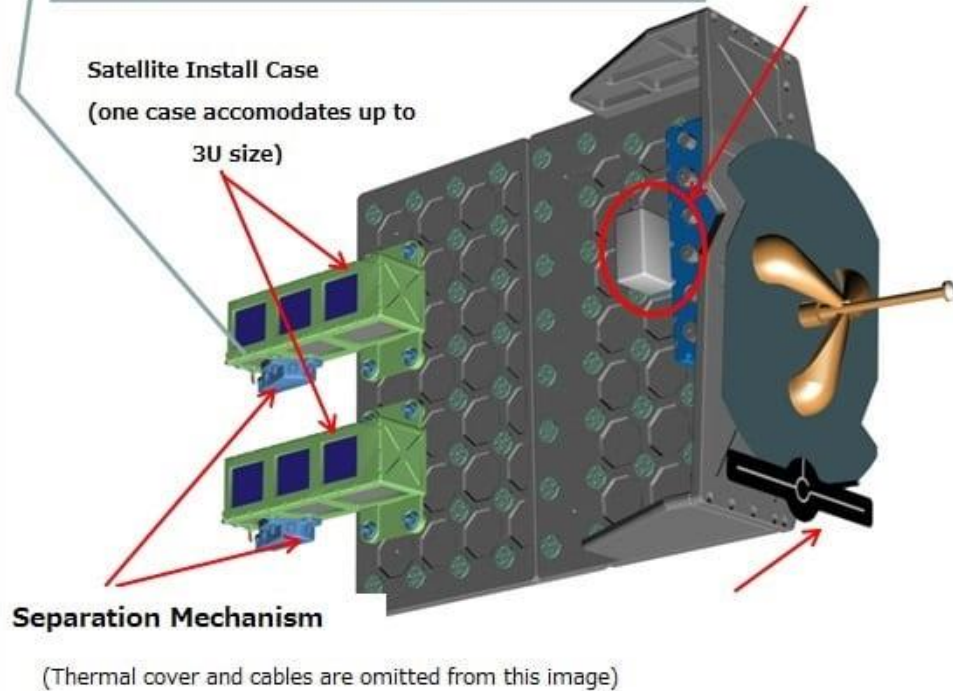
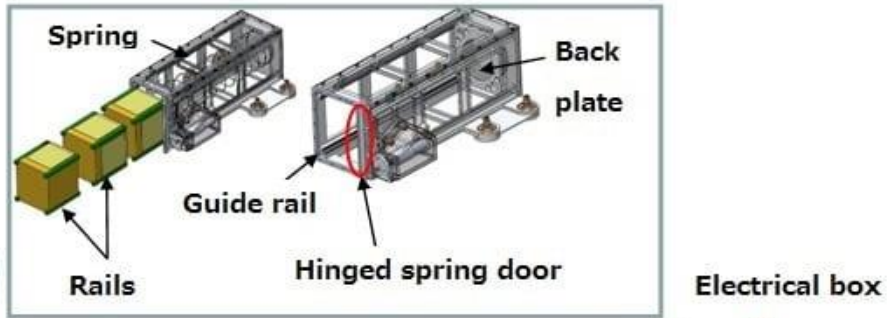
https://www.unoosa.org/oosa/en/ourwork/access2space4all/KiboCUBE/KiboCUBE_Index.html

Note

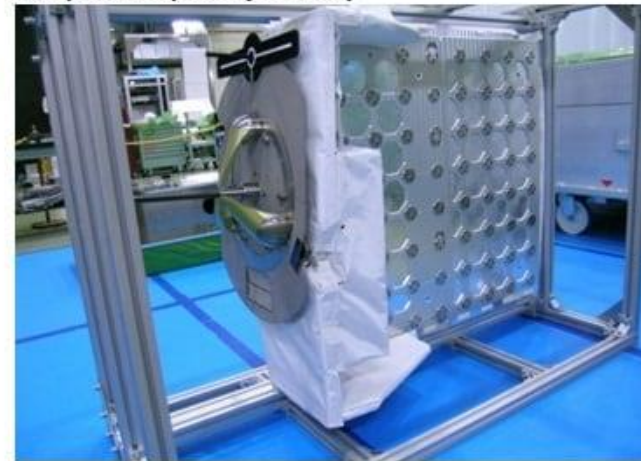
**Both J-CUBE and KiboCUBE use the
same ISS deployment system:**

J-SSOD

See the next page



Edge of the Japanese Experiment Module Remote Manipulator System (JEMRMS)



Multi-Purpose Experiment Platform (MPEP)

JEM Small Satellite Orbital Deployer (J-SSOD) is a mechanism for deploying small satellites. It is designed in accordance with CubeSat design specification (10cm × 10cm × 10cm). The satellites installed in J-SSOD is transferred from the Japanese Experiment Module Kibo's airlock to space and are released on orbit.

In order to respond the increased demands for the CubeSat deployments, a reusable satellite orbital deployer (JEM Small Satellite Orbital Deployer Re-usabla: J-SSOD-R) has been introduced in March 2021, which accommodates the maximum 24U (6U per each deployer) capability.

JEM Small Satellite Orbital Deployer (J-SSOD)

FROM: <https://humans-in-space.jaxa.jp/en/biz-lab/experiment/facility/ef/jssod/>

Would you like to know more about J-CUBE?

With J-CUBE you are more likely to secure a launch slot than with KiboCUBE, and at a cost far below commercial launch fees.



zoom



Then join the

1st

**J-CUBE
Webinar**

on

21 April 2022

A series of *J-Cube webinars* are planned:

[1] 21-April, 7:00 PM, JST

[2] 22-June, 9:00 AM, JST

[3] ... more to be developed later

AGENDA OF THE FIRST J-CUBE WEBINAR

[1] 10-min. introduction by Prof Mengu Cho of Kyutech.

A) General overview of how to collaborate with a Japanese university.

Note: J-CUBE requires that you work with a Japanese university so that smooth development occurs.

B) Some hints on satellite designs for ISS deployment.

[2] 15-min. talk by Dr. Joseph Ofofu of Kyutech.

He will cover the satellite testing capabilities of Kyutech, as well as other useful resources to parties building, testing, and launching, CubeSats.

[3] In future J-CUBE Webinars, other universities will make presentations. If your university is interested in presenting, please contact UNISEC J-CUBE office. info-jcube@unisec.jp

This is the ZOOM link for the first webinar:

Topic: **J-CUBE Webinar #1**

21 April 2022, 7:00 PM, JST

ZOOM link:

<https://us02web.zoom.us/j/86522398441?pwd=bUh3eWdYTWxBVDY1U0Nmd1NacnNldz09>

Meeting ID: 865 2239 8441

Passcode: 247093

This webinar is open to the public. I will be the moderator. You will have a chance to ask a question or two.

-- G. Maeda, assistant professor, Kyutech.

16 APRIL 2022

END