








VOYAGER

COMPANY OVERVIEW

Since 2019, Voyager has **acquired** seven companies that are now part of the Voyager holding.

	Est. 1957
	Est. 1996
	Est. 2002
	Est. 2007
	Est. 2009
	Est. 2010
	Est. 2019

SPACE SOLUTIONS



- Leading Commercial Service Provider on ISS
- High-performance systems for satellites, constellations, spacecraft, lunar vehicles, space stations, and more
- Astronaut Health Space Communications
- Lunar Payloads and Services
- STEM Projects



STARLAB

- 2021 Space Act Agreement with NASA for the CLD Program to Develop Commercial Space Stations.



US NATIONAL SECURITY

- Critical technologies and intelligence for defense systems.

COMPANY OVERVIEW

600

EMPLOYEES

21+

YEARS ON ORBIT

1.000+

MISSIONS FLOWN

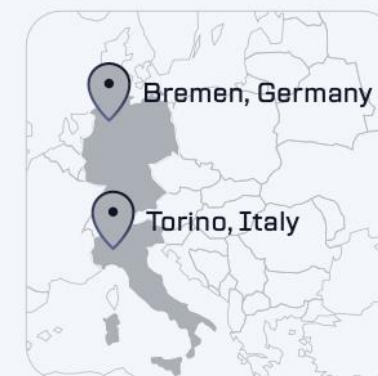
20+

GOVERNMENT AGENCIES

SPACE SOLUTIONS

STARLAB

US National Security



Leader In Developing The LEO Ecosystem

Voyager is first company to own, operate and market its own hardware on the ISS thanks to its 11 facilities.

PlateReader
(COLUMBUS)

Nanode and BlackBox Facility
(COLUMBUS)

Cubesat Deployer
(JEM Airlock)

NR External Platform
(JEM External Facility)

BISHOP –
Commercial Airlock

Cupola

Mixstix Operations
(US LAB)

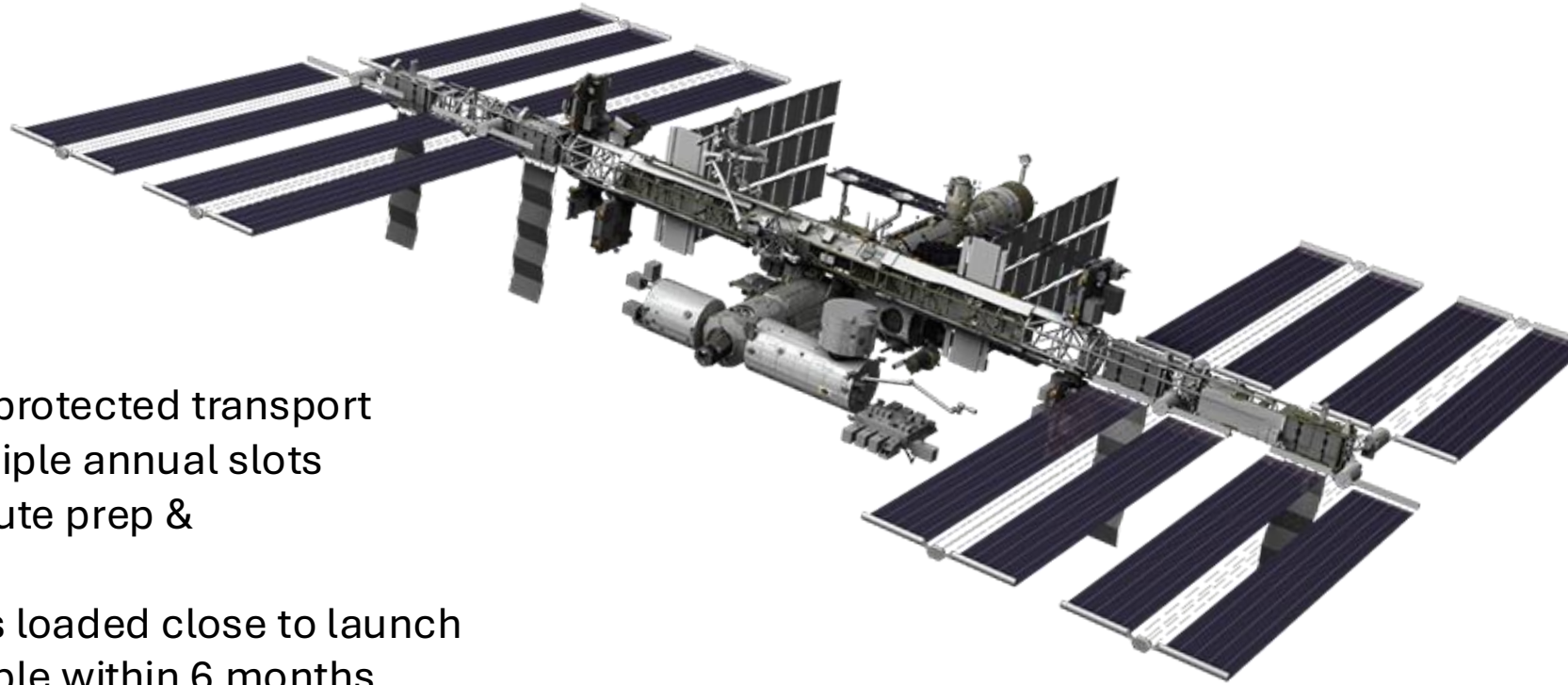
Our End-to-End Operation Services

Engineering Services

- Concept to Payload
- Engineering & Integration
- Ops via Voyager Europe
- ISS Safety & NASA Compliance

Launch & On-Orbit Services

- **Soft-Stowed Launches** – Shock-protected transport
- **Flexible Launch Windows** – Multiple annual slots
- **Crew-Assisted Setup** – Last-minute prep & troubleshooting
- **Late-Load Integration** – Payloads loaded close to launch
- **Rapid Reflight** – Re-launch possible within 6 months
- **On-Orbit Checkout** – Live comms via Nanoracks Bridge



Internal Platforms

Nanolab

Nanolabs are at the core of our exploration philosophy: standardized & miniaturized hardware, low-cost and open sourced that allows you to focus more on your research thanks to our space aimed design guidance.

Nanolabs can host a wide variety of experiments from building plant-growth chambers, studying DNA, biology and biotechnology testing, materials and physical sciences, and more.

Volume scales starting from 20 x 10 x 10 cm (1U) up to 40 x 20 x 10 cm (4 x 2U)

Active experiment provided with power and data connectivity



Types of Experiments Flown

Bio-Science and Technology Research

—
Plant growth chambers

—
DNA studies and
radiation exposure

—
Biology and
biotechnology testing

—
Materials and physical
sciences

—
Protein crystal growth

—
Technology
demonstration

—
Physics

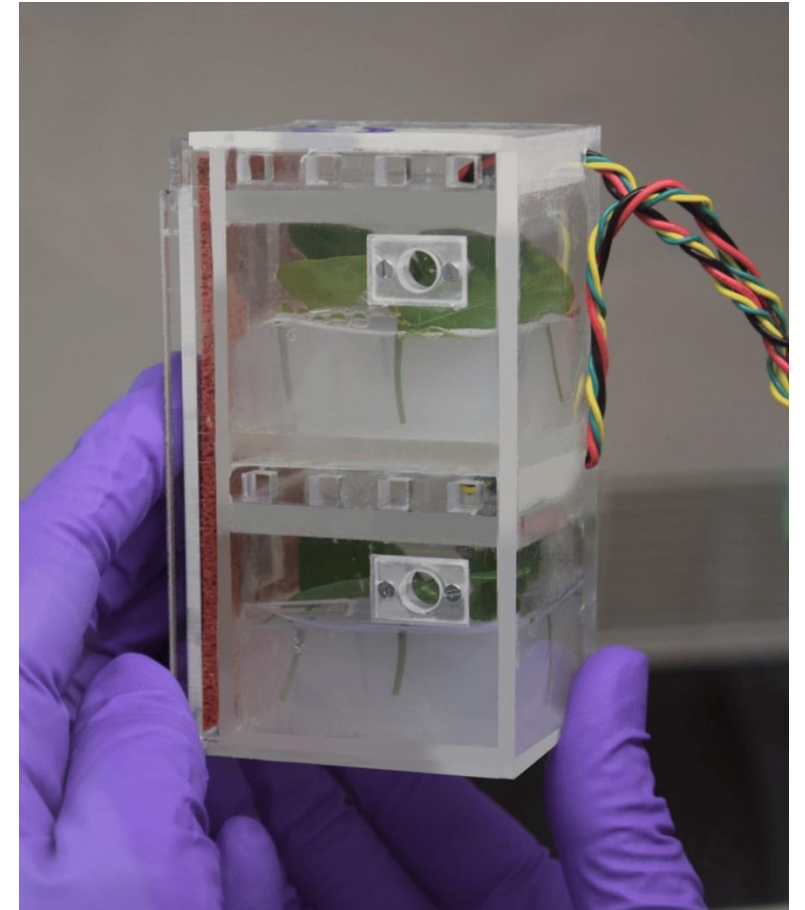
—
Spacecraft materials

—
Computing

—
Main single board
computer

—
Actuators (e.g. motors,
solenoids)

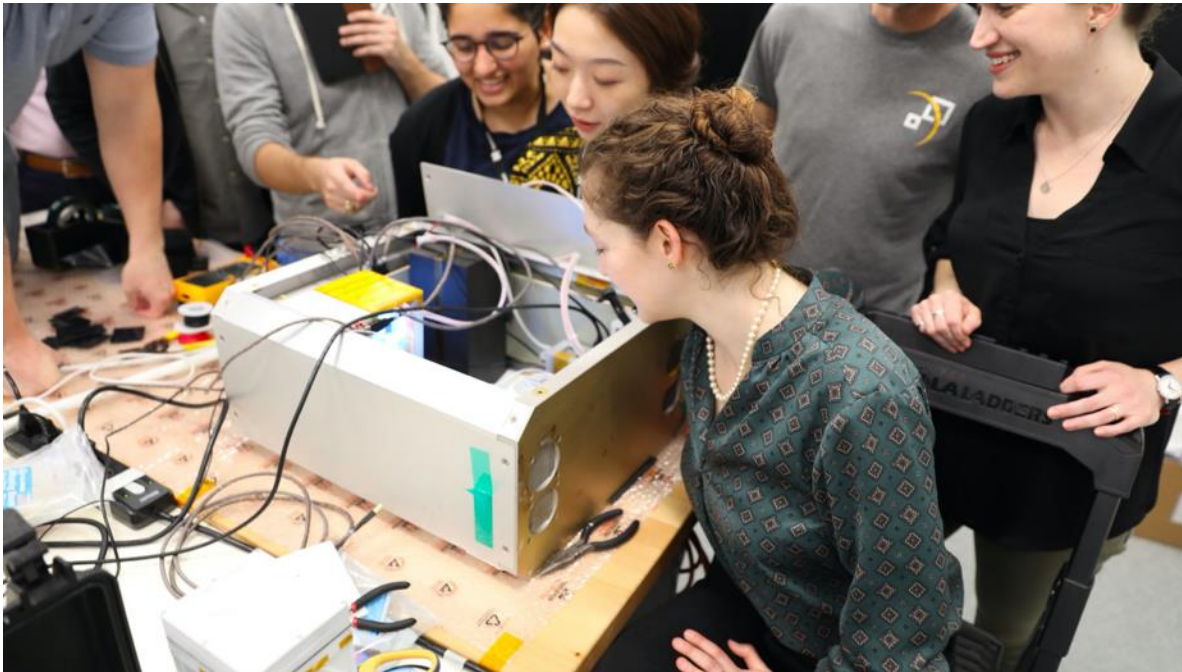
—
Sensors (cameras,
humidity sensor,
temperature sensor, etc.)



BlackBox

Voyager's BlackBox is our feature platform that provides for larger, more advanced in-space research.

BlackBox is a remotely commanded research platform fully integrated on the ground and completely handled from the astronaut crew.



ISS ExPRESS Rack

Provides data, power, and structural interface to the ISS

Our available camera system can be added to the platform

Up to 20GB per week data downloads (Standard contract is 6GB/week)

Connections details:

12 x USB 3.0 ports for data and power up to 5VDC @ 2A

12 x Auxiliary Power connectors 5VDC @ 5A & 12VDC @ 3A

Ground interface through Voyager's Mission Control (BRIDGE)

Bigger volume bigger experiment scale

Plate Reader 2.0

Voyager's Plate-Reader-2 (2nd generation) is a reconfigured Molecular Devices SpectraMax M5e – one of the most reliable, durable, feature-rich microplate readers on the market.

Plate Reader-2 features a wide range of high-performance multi-mode reader capabilities ideal for life science research **including absorbance, time-resolved fluorescence, and fluorescence polarization** modes with full spectral range detection.

6-, 12-, 24-, 48-, 96-, and 384-well microplates

Data downloads

Repeatable experiments

Extended research windows available

Returnable samples



External Platforms

NREP

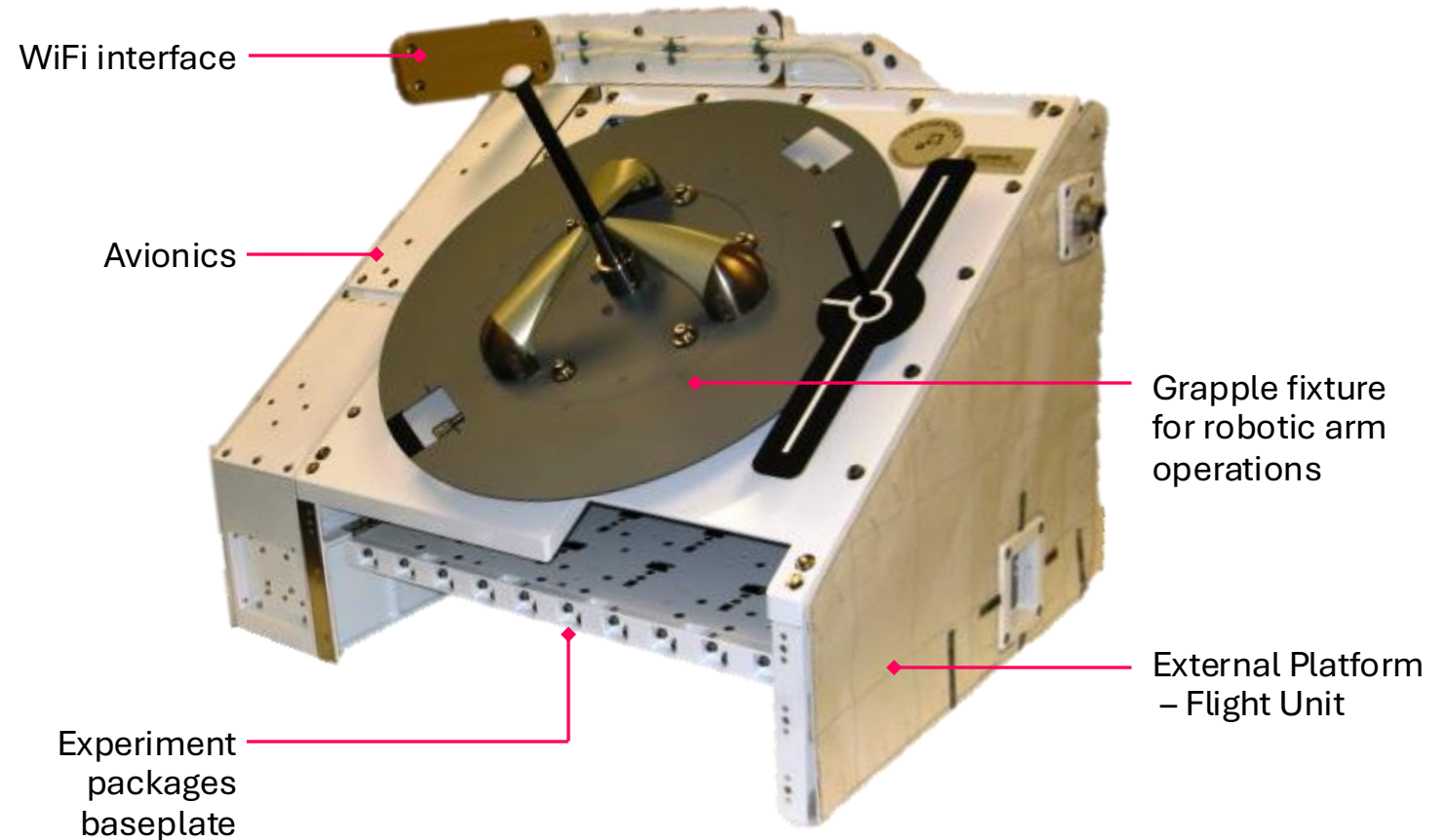
Voltage	28 VDC +/- 2 V or 120 VDC as option
Total power	50 W at 28 Vdc
Maximum current	2A
USB 2.0 bus	Data
Total payload data rate	Up to 8 Mbit/s

NREP provides all functions of the conventional spacecraft bus

No further subsystems necessary

Ideal platform for small size hosted payloads

Improved anomaly resolution by human in the loop



Bishop Airlock - Internal Payloads

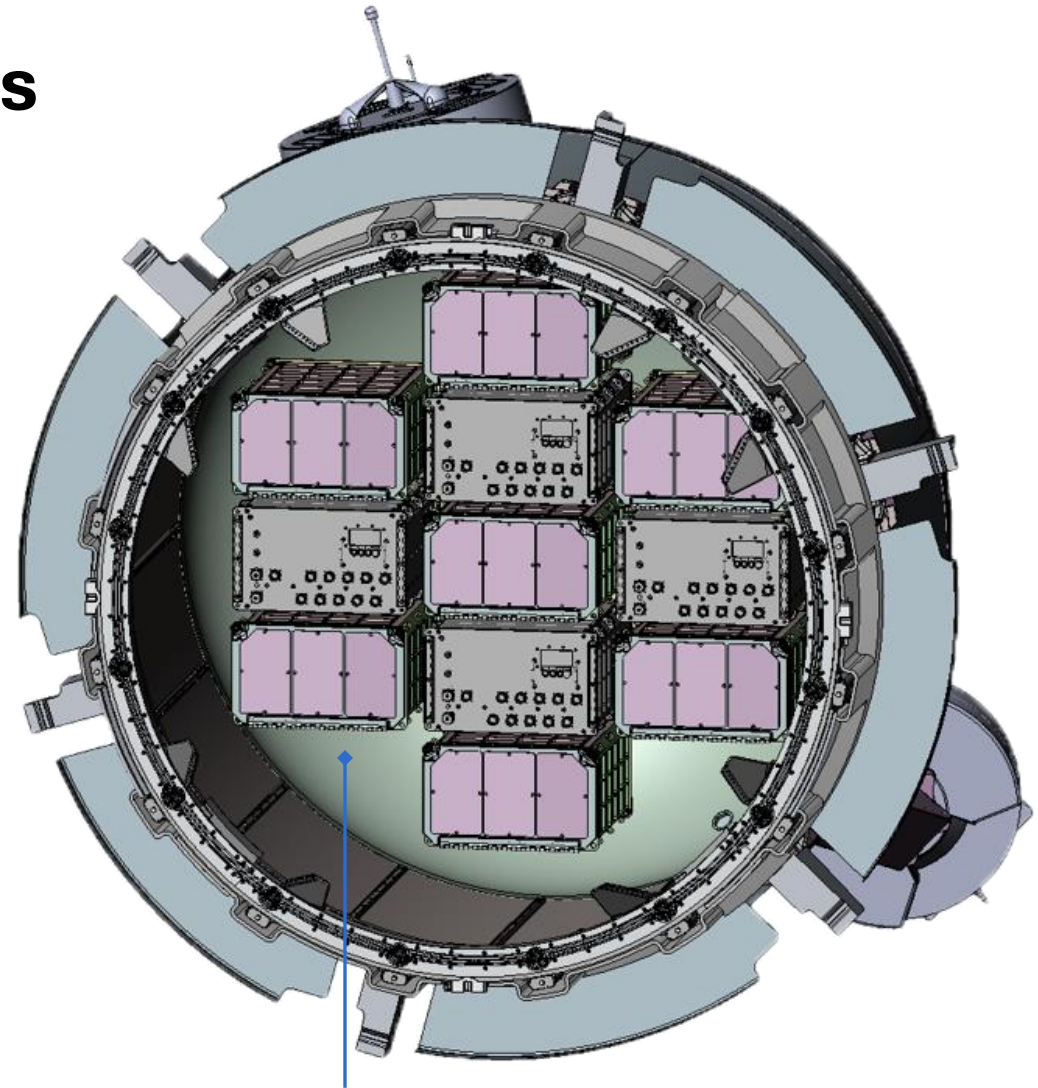
Typical internal ISS
Rack/Locker type payload

- Power: 120 VDC, 700 Watts (4 sites internal)

Can operate in ISS
environment (Node 3 hatch open) or in various pressure conditions down to vacuum (Node 3 hatch closed)

Similar electrical interfaces
as ISS Racks

Examples: Locker payloads,
glove box payloads, NR
Frame payloads, custom size
internal payloads



Representative mid-deck locker
type payloads

Bishop Airlock - External Payloads

Nanoracks External Laboratory (NEL)

The evolution of Nanoracks External Platform is NEL, hosted in the Bishop external payload location.

Six external payload sites available

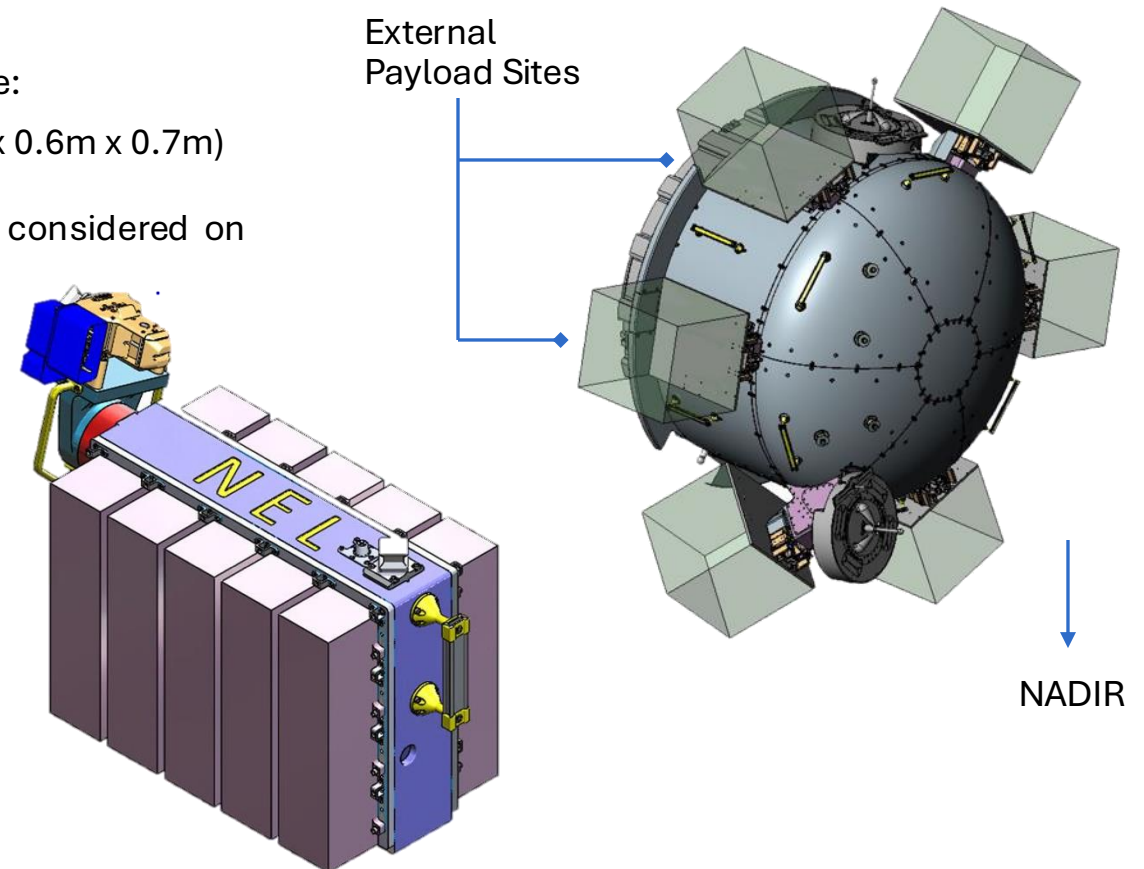
- Oceaneering GOLD 2 connector provides electrical, mechanical and robotic interface to payloads and NEL

Nominal Payload Envelope:

- 24" x 24" x 28" (0.6m x 0.6m x 0.7m)
- 500 lbs (227 kg)
- Exceedances may be considered on a case-by-case basis

Redundant power and data interfaces:

- 120 VDC; 700W max
 - Note: Power is shared on ISS, overall Airlock power draw may limit individual payload usage
- Ethernet data
- Data storage capability within Airlock avionics



Deployment Capabilities

Nanoracks Cubesat Deployer (NRCSD)

STANDARD PAYLOAD PROVISIONS

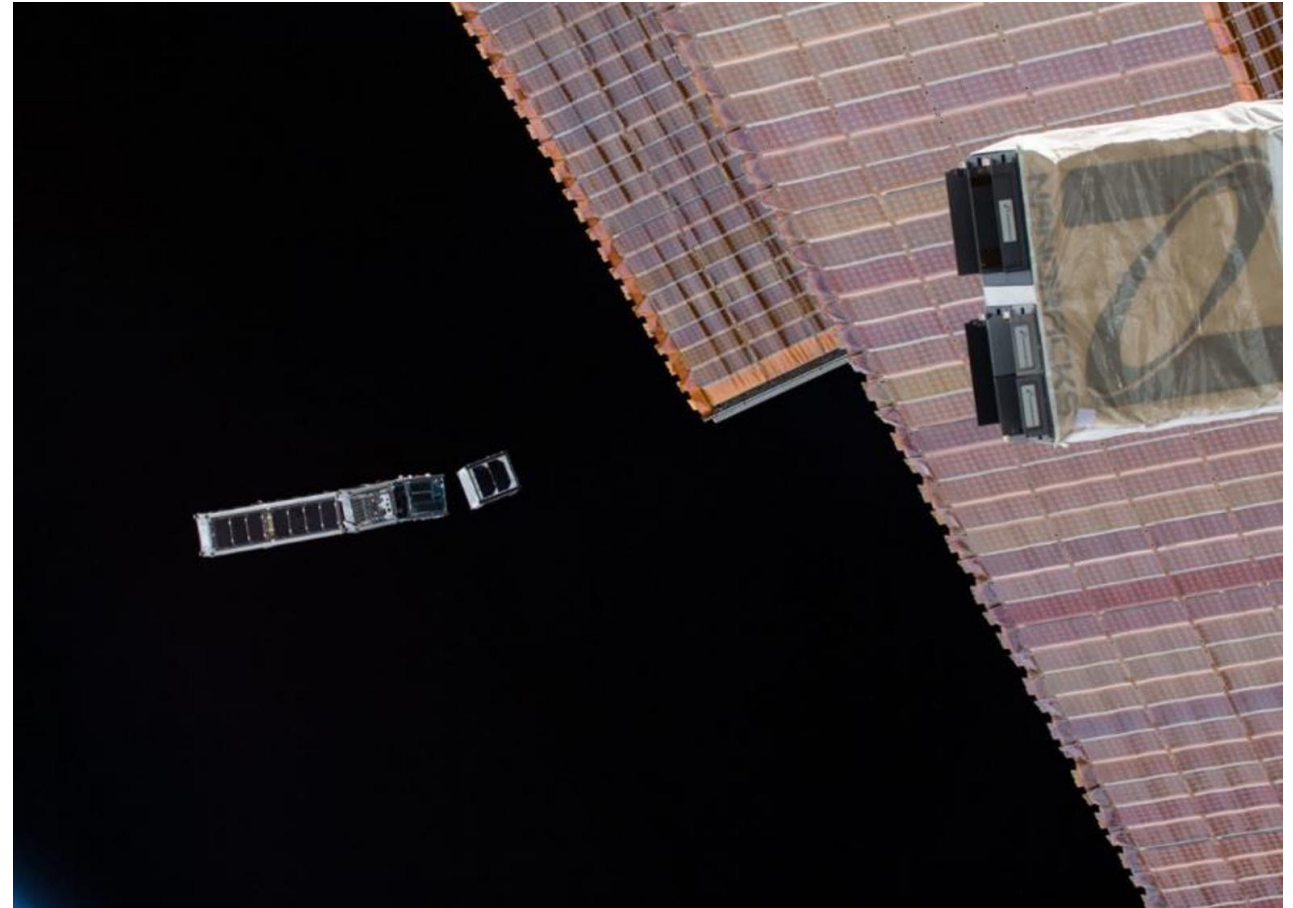
Volume (Single)	From 1U to 6U (1x1x6U)
Volume (Double)	From 1x2x2U to 1x2x6U – Max 12U



Single Wide



Double Wide

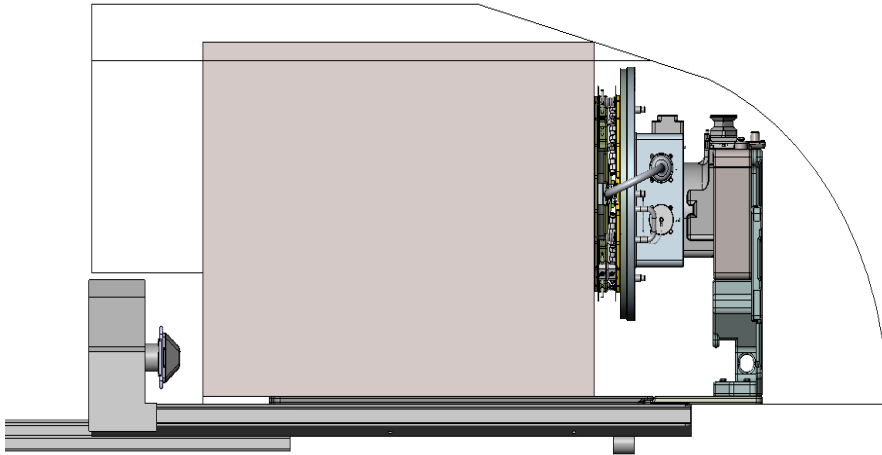


KABER

Max Volume Shown Below

Envelope shown is JEM Airlock static envelope. Mission-specific envelope reductions to accommodate tolerance accumulations and micro-G disturbances are TBD.

Maximum mass: ~83kg



Additional envelope available for other form factors (e.g., a reduction in width allows an increase in length.)



STEM Programs

MixStix

Mixture enclosed tubes for multi substance hosting. Kept separated until docking to be then mixed when on board of the ISS.

10 ml of usable volume into the parylene coated silicon tubes

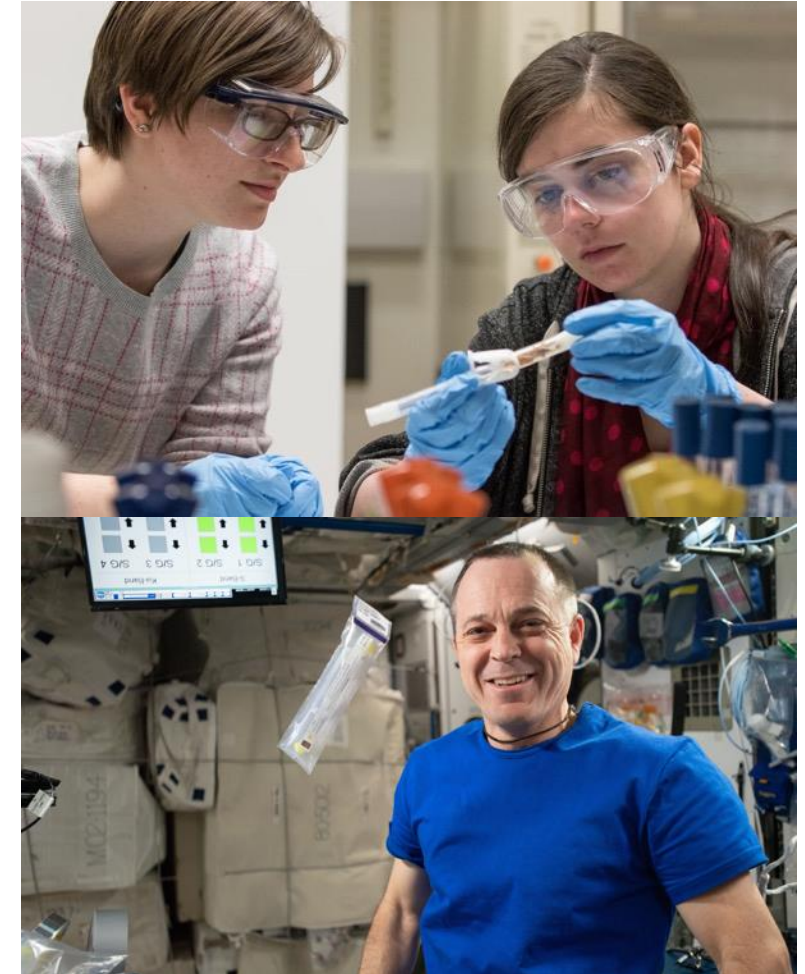
Modular single, double, or triple internal volume subdivision

Operated directly by astronauts on board

Can be stowed cold at -4°C or ambient at $+25^{\circ}\text{C}$ (mandatory when on board)

Capable to host a wide variety of experiments from Fluids, Materials and Chemicals all the way up to Biologicals

Easy to be filled in laboratory also by non-professional equipe

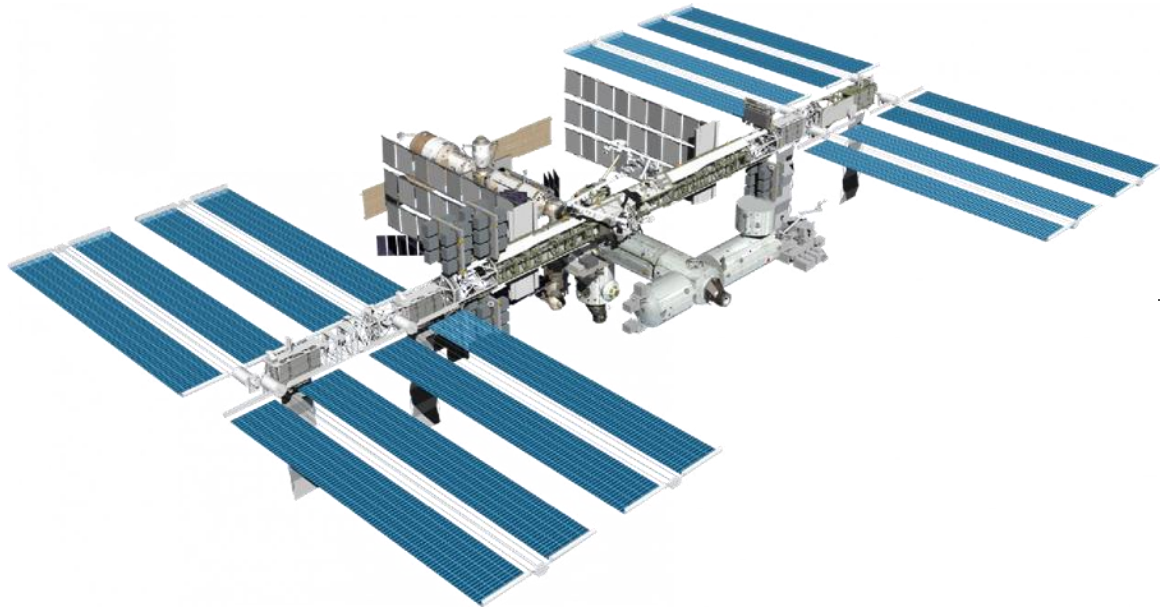


DreamCoder - Inspiring the Next Generation of Space Innovators

- A unique STEM e-learning experience that brings space closer to students
- Teaches programming fundamentals through an exciting, Python-based space mission framework
- Empowers students to code, test, and explore using real hardware - on Earth and aboard the ISS
- Fosters passion for space and technology through hands-on interaction with microgravity experiments
- Bridges the classroom and outer space, turning learners into future space pioneers



The ISS is Near Retirement and Unable to Meet Growing Space Demand



ISS has been a remarkable innovation platform.

The only other station in orbit is China's, a geopolitical risk

Microgravity demand continues to grow but cannot be scaled/commercialized on ISS

2030

- Planned de-orbit date after 30+ year of service

30%

- Estimated crew time spent on maintenance today

33%

- Of planned commercial payload grounded in 2023 due to NASA capacity constraints

\$6bn+

- Annual ISS budget

300+

- New microgravity patents from global research

250+

- Ongoing experiments by ISS partners

Starlab Joint Venture

Founded in 2023, Starlab Space is a US-led, **global strategic joint venture** to develop, own and operate the Starlab space station.

Starlab is ensuring a seamless transition of microgravity research from the ISS into the new commercial space station era.

Starlab, an **AI-enabled space station**, is being designed to facilitate groundbreaking research and innovation. Its advanced, user-driven design and robust capabilities make it a **premier platform for scientific discovery and technological advancement**.

Each partner brings a unique expertise, leveraging **advanced technologies**, **securing international demand and funding**, and mitigating financial and execution risks

JV EQUITY PARTNERS

Starlab is positioned as a competitive multi-national successor to the ISS



STRATEGIC PARTNERS



LAUNCH PROVIDER



Meet Starlab

RESEARCH EQUIPMENT

Equipment optimized to meet the needs of sovereign agencies, commercial customers and universities

ROBOTIC ARM

Eliminates need for risky and costly extra vehicular activities (spacewalks)

ONE LAUNCH

Significant cost reductions and minimal orbit assembly risk

LARGE 8-METER DIAMETER METALLIC HABITAT

100% of the ISS research capacity in just 40% of the ISS volume, all in a single launch



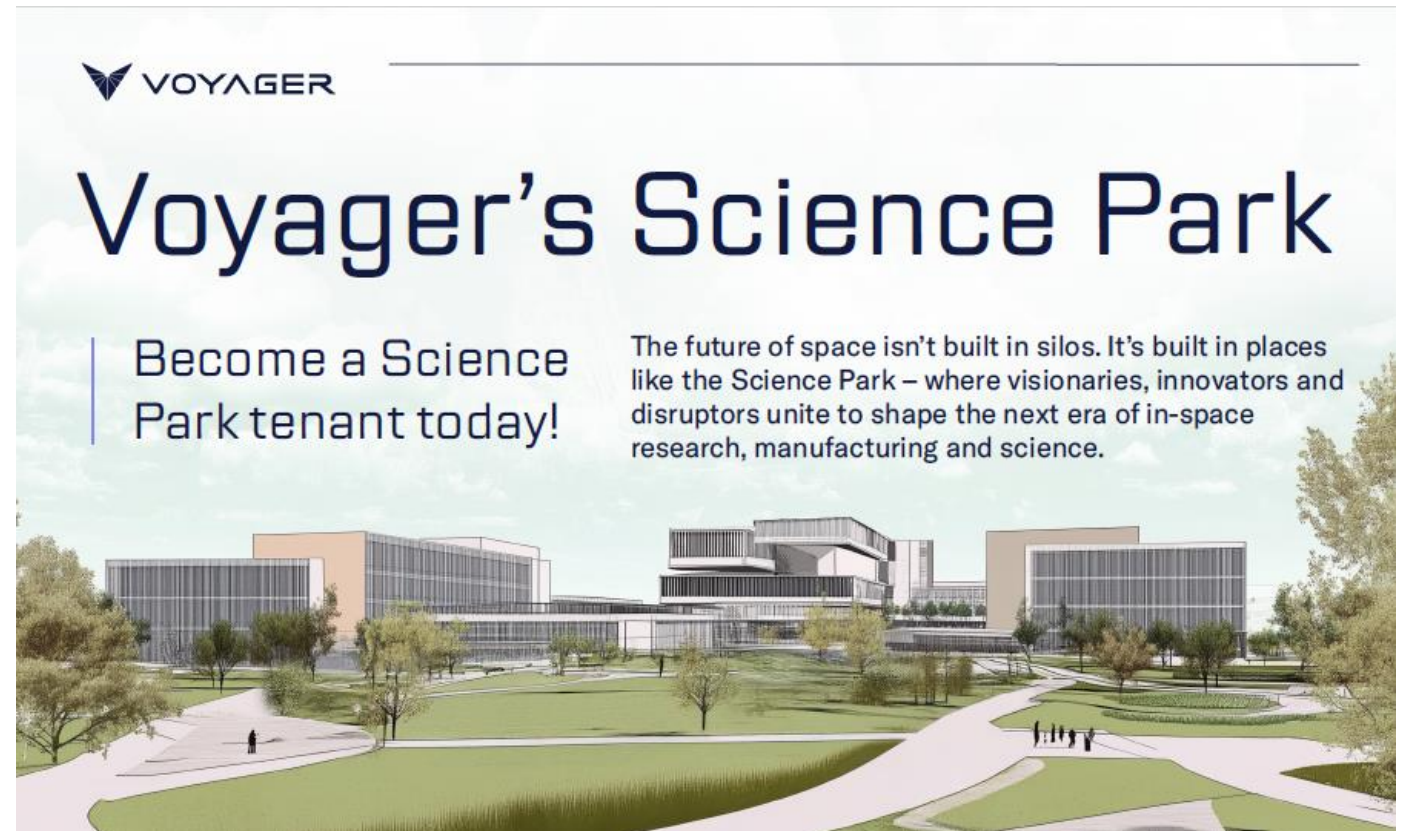
Voyager's Science Park

Imagine a place where the brightest minds in aerospace, robotics, AI and science research converge - a place where innovation isn't just encouraged but accelerated.

Tenant Benefits:

- **Commercial**
 - Retain your IP
 - Schedule and prioritize missions through Voyager's extensive experience - reduce payload verification timelines by months
- **Universities**
 - Reduced cost for researchers - "observatory model"
 - Engage interns & graduates in the space industry
- **Sovereign Space Agencies**
 - Reduced cost through "observatory model"
 - Accelerate national science and technology expertise
- **Defense Companies**
 - Faster, less expensive access
 - Maintain secrecy through established cybersecurity, firewalls, operating procedures and scheduling

Voyager's Science Park is more than just a research hub; it's the only space ecosystem in the U.S., designed to fuel innovation and accelerate breakthroughs for in-space research, manufacturing and services. Tenants include established companies, startups, research institutions and government agencies.



Thank you!

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