Oryx

Payload and Mission-Specific Flight Software.

Oryx is a software tool to develop payload and mission-specific flight software. Its modular architecture, built from flexible building blocks, supports rapid software development. With a vast library of components – such as logging, scheduling, testing, and communication – Oryx simplifies the development process, ensuring even and efficient operations.
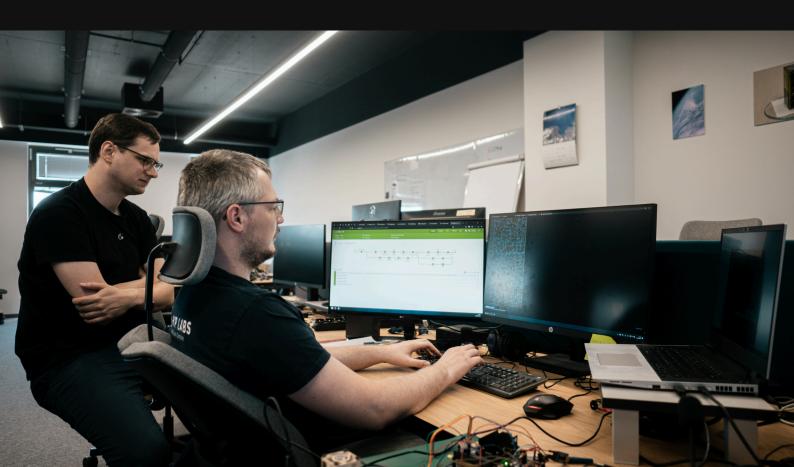
Custom Payload Management

Specializes in real-time satellite communication and data handling, ensuring seamless operation between space systems and ground stations.

Fault Detection and Recovery

Incorporates robust systems for monitoring, detecting anomalies, and initiating automatic recovery to maintain mission continuity.

GLOWS-IMAP

- Developed by CBK PAN in collaboration with KP Labs, GLOWS is one of ten instruments on NASA's IMAP mission, studying the heliosphere and solar wind interactions with interstellar hydrogen.

- KP Labs created autonomous software for telecommand, telemetry, and data processing, supporting efficient, remote operations.

- The updated Oryx software was successfully uploaded to PW-Sat2, enabling efficient "Deep Sleep" operation and extending the satellite's functionality until its planned de-orbit.

PW-Sat2

- PW-Sat2, developed by students from Warsaw University of Technology, aims to test a de-orbit sail to reduce space debris, ensuring quicker disposal of unused satellites.

- KP Labs created an energy-saving version of the Oryx software to stabilize PW-Sat2's power after sail deployment, integrating key modules like telemetry and telecommand.

- The updated Oryx software was successfully uploaded to PW-Sat2, enabling efficient "Deep Sleep" operation and extending the satellite's functionality until its planned de-orbit.

■ Contact Us

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