

NEWSPACE MARKET · COMPANY PROFILE



OreSat (Portland State Aerospace Society)

United States · founded 1998 · oresat.org

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as of 20 August 2026

OreSat (Portland State Aerospace Society)

OreSat is an open-source, 'artisanally hand-crafted' CubeSat platform developed by the Portland State Aerospace Society (PSAS), an interdisciplinary student aerospace project within Portland State University's Maseeh College of Engineering and Computer Science. PSAS traces its roots to amateur rocketry work in the late 1990s and has since grown into a group of roughly a hundred students of all majors, along with graduate students, faculty advisors, and industry mentors, operating under 501(c)(3) nonprofit status through the PSU Foundation. The OreSat program's design is an open-source, modular, card-cage CubeSat bus scalable from 1U to 3U, intended as an inexpensive, educational platform that other student and university teams can build on. Its first spacecraft, OreSat0, was a 1U CubeSat billed as Oregon's first satellite; it launched on an Astra Rocket 3.3 (mission LV009) on March 15, 2022 into a 525 km sun-synchronous orbit, flying solar panels, batteries, radios, an onboard computer, GPS, and a star tracker to provide flight heritage for OreSat's subsystems. PSAS followed with OreSat0.5, a 2U CubeSat that launched aboard SpaceX's Transporter-11 rideshare mission on August 16, 2024 into a 510 km sun-synchronous orbit, deployed via ExoLaunch's NOVA CubeSat Deployer. OreSat0.5 demonstrated the attitude determination and control system (ADCS) of the OreSat bus and carried the Cirrus Flux Camera (CFC), a short-wave infrared sensor for Earth observation. The flagship OreSat mission, a 2U CubeSat accepted into NASA's CubeSat Launch Initiative (CSLI) and planned for deployment from the International Space Station via NanoRacks, is designed to carry two independent payload missions: OreSat Live and CFC.

This profile is generated from the live NewSpace Market catalogue. Specifications are as published by the manufacturer; every product links to a page where a request for quotation reaches the company directly.

SERVICES

Services

FlatSat Integration and Test Platform

A FlatSat is an integration and test platform for hardware, firmware, and software development, allowing for easy access and debugging of satellite components.

Helmholtz Coil Magnetic Field Testing

They use a DIY Helmholtz cage to precisely control and test magnetic field vectors for magnetometers and magnetorquers.

RF Anechoic Chamber Testing

The company provides antenna and EMC testing services within an RF anechoic chamber to evaluate radio frequency performance.

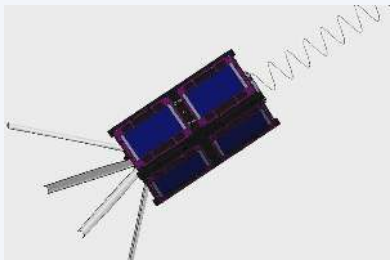
Thermal Vacuum (TVAC) Testing

The company performs thermal vacuum testing to simulate the extreme temperature and vacuum conditions of space on satellites.

Vibration and Acceleration Testing

They perform 3-axis vibration and acceleration testing on satellites according to NASA specifications to ensure structural integrity during launch.

Product catalogue



ORESAT (PORTLAND STATE AEROSPACE SOCIETY)
OreSat

OreSat is a 2U CubeSat developed as the flagship satellite for the OreSat Project, featuring a hand-crafted, open-source bus designed for educational purposes.

price on request



ORESAT (PORTLAND STATE AEROSPACE SOCIETY)
OreSat0

OreSat0 is a 1U CubeSat designed to provide flight heritage for critical subsystems of the OreSat system, including solar panels, batteries, radios, computer, GPS, and a star track

Form Factor	1U CubeSat
Frame Material	6061 Aluminum, Type II anodized black
Frame Version	v1.2.0, 2021-09-18
Solar Modules	4x (v5.3)
Solar Cells per Module	2x Spectrolab XTE GaAs
MPPT	On-board per solar module
+Z End Cap Version	v1.1

price on request



ORESAT (PORTLAND STATE AEROSPACE SOCIETY)
OreSat0.5

OreSat0.5 is a 2U CubeSat technology demonstration mission for the OreSat bus's attitude determination and control system (ADCS) and the Cirrus Flux Camera (CFC) short wave infrare

Form Factor	2U CubeSat
Launch Date	August 16th, 2024
Launch Vehicle	SpaceX Transporter-11
Orbit	510 km sun synchronous low earth orbit (SSO)
Deployment Provider	ExoLaunch
Primary Systems Demonstrated	OreSat bus ADCS, Cirrus Flux Camera (CFC) SWIR sensor
Radio	UHF radio

price on request

Contact OreSat (Portland State Aerospace Society)

Open the company profile on NewSpace Market to see full specifications and datasheets, and to send a request for quotation that reaches the manufacturer directly.

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<https://www.oresat.org>

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