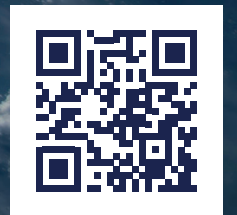


# VERSATILE SATELLITE PLATFORM FAMILY

MULTI-MISSION-READY  
AGNOSTIC SATELLITE BUS



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## MULTI-MISSION-READY AGNOSTIC SATELLITE BUS



### INTRODUCTION

Low Earth Orbit (LEO) represents a rapidly growing and high-demand region of space for new space vehicles. The demand for earth imagery and data collection from both commercial and government entities places a growing need for LEO satellites. These satellites provide a great utility in that they support multiple applications across the fields of Earth observation, communication, situational awareness, monitoring and more.

Diverse payloads can fulfill missions that rapidly collect data from across the globe, providing valuable insights for decision-makers on tactically relevant timelines in commercial organizations, institutions, emergency services and governments.

Now more than ever, there is a need for Versatile Satellite Platforms that can be customized to mission needs, and rapidly deployed at efficient costs to meet current demand.

### AEROSPACE LAB'S VERSATILE-SATELLITE PLATFORM



Aerospace Lab has designed the Versatile-Satellite Platform (VSP), a flight-proven satellite platform ready to support a variety of LEO missions. With a standardized modular core design, the VSP is quickly adapted for a wide range of payloads, including optical imagery, radio frequency detection instruments, telecom services, space domain awareness and missile defense.

Through its vertically integrated strategy, Aerospace Lab produces key VSP subsystems in-house to ensure rapid delivery and superior quality control. Designed to be compatible with serial manufacturing, the VSP is ideal for in-orbit demonstrations and cost-effective satellite constellations to maximize coverage, revisit frequency, stability and availability of data.

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- **Proven Heritage:** Aerospacelab successfully launched six VSP-150 satellites within a year.
- **Highly Verticalized Platform:** Aerospacelab manages its supply chain with vertical integration; key sub-systems crafted in-house.
- **Competitive Pricing:** VSP pricing is efficient and adaptive to support customer needs.
- **Seamless Integration:** Aerospacelab's system engineering tools enable successful integration of various payloads to support mission operations and functionality.
- **Rapid and Optimized Schedules:** By utilizing off-the-shelf solutions and streamlined AI&T processes, Aerospacelab supports launch schedules that enable mission payloads access to space.
- **Designed for Demisability:** The VSP product-line includes both active and passive deorbit capabilities.

Aerospacelab currently offers the VSP product-line: VSP-50, VSP-150, and VSP-300, to serve mission payloads up to 100 kg and 80 cm<sup>3</sup>. Aerospacelab can offer tailored solutions for larger and/or non-standard payloads, relying on the heritage of its VSP platform catalogue.

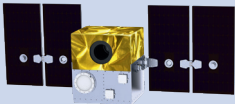
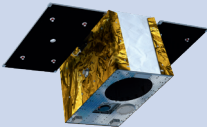
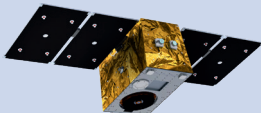
	VSP-50	VSP-150	VSP-300
FEATURE			
LIFESPAN		> 5 years	
BUS DRY MASS	37 kg	100 kg	300 kg
MAXIMUM PAYLOAD MASS	20 kg	50 kg	100 kg
RIDESHARE INTERFACE	¼ plate	½ plate	Full plate / Full plate XL

Table 1: VSP offerings specifications at a Glance

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### VSP-150 – PROVEN PERFORMANCE

Aerospacelab successfully launched six VSP-150 platforms; three hosting Earth Observation payloads and 3 hosting RF Sensing payloads. Today, each satellite is operating nominally and performs targeted communication and data acquisition across the Earth's surface by leveraging the VSP's high pointing accuracy, platform stability and maneuverability.

The first VSP-150, Grégoire, carries a Free-Space Optical Communication (FSOC) terminal to transmit data to the ground via an optical link. The recently launched VSP-150 additions to the Aerospacelab fleet – Riri, Fifi, and LouLou – carry Radio Frequency Sensing (RFS) payloads. Operating as a trio, the satellites identify and characterize radio frequency emissions for use-cases including asset tracking, supply chain monitoring, geo-location and emergency search and rescue operations.

The remaining operational VSP-150 spacecraft, SPIP and Rose, carry optical payloads. SPIP captures multi-spectral images, useful for characterizing natural environments for agricultural planning, climate change, infrastructure and land-use monitoring. Rose takes very-high resolution images that can be used for emergency response, asset and infrastructure monitoring, and urban planning.

### CONCLUSION

Aerospacelab's Versatile-Satellite Platform (VSP) is a flight proven reliable TRL-9 platform ready to carry a variety of payloads into LEO orbit. With six VSP-150 satellites hosting four different types of payloads, Aerospacelab has demonstrated the versatility and adaptability of the VSP product line.

### ABOUT AEROSPACELAB

Founded in 2018, Aerospacelab is an emerging figure in the aerospace sector, showcasing a remarkable achievement of eight satellites successfully deployed in orbit. We pride ourselves on our dedication to vertical integration and TRL-9 implementation, solidifying our commitment to driving innovation in the space industry. With our operations strategically placed in various locations, including the U.S., Aerospacelab remains steadfast in its mission to deliver pioneering solutions for our diverse customer community.

For more information about the Aerospacelab Versatile-Satellite Platform, please contact [sales@aerospacelab.com](mailto:sales@aerospacelab.com)