

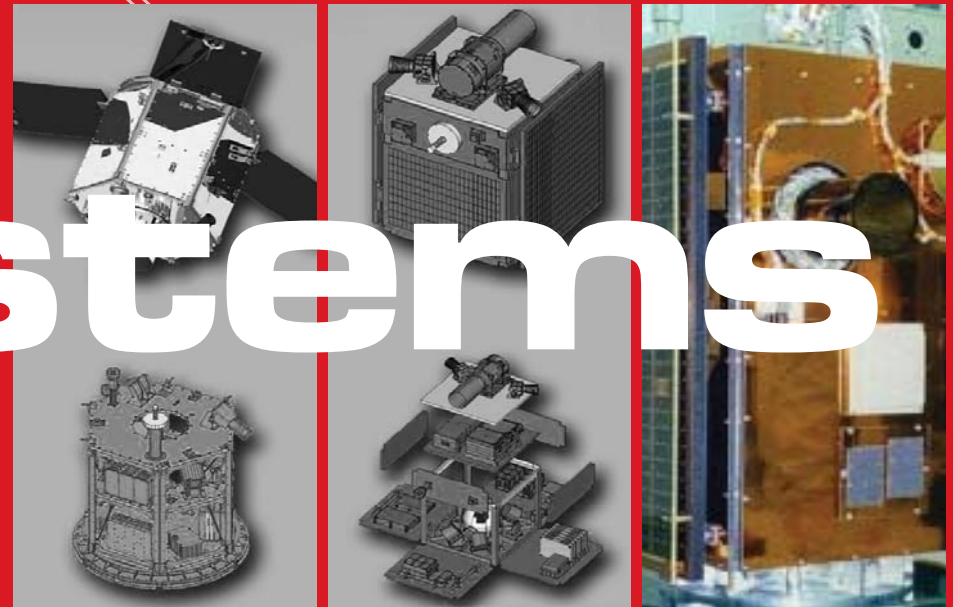
**CHALLENGING
SPACE SMART**

SPACECRAFT

Systems

Spacecraft Systems

Satrec Initiative (SI) offers the world's most flexible, reliable, and cost effective platforms for small satellite payloads. The SI-100 platform ranges from 80-100 kg, the SI-200 platform ranges from 100-200 kg, and the SI-300 ranges from 200-300 kg. These standard platforms are essentially the basic satellite bus onto which various payloads can be applied (such as firm's line of electro-optical payloads). SI also offers flight proven integrated satellite bus and electro-optical payload systems that can offer 1-10 meter resolution Earth imaging capabilities.



si satrec
initiative



SpaceWorks
Commercial
A Division of SpaceWorks Engineering, Inc. (SEI)
Official U.S. representative of Satrec Initiative

www.satreci-us.com



The SI-100 platform is a flexible system for relatively small sized payloads. The SI-100 platform can be combined with SI's EOS-A electro-optical payload to yield a 100 kg class Low Earth Orbit (LEO) micro-satellite system, providing 10 meter level resolution for multi-spectral imaging. It incorporates a three-axis stabilized attitude control system. The SI-100 platform is suitable for piggy-back satellite launches. Such a system can be utilized for technology demonstration purposes or as a stepping stone for cost-effective space development.

The SI-200 platform is suitable for small satellites where the accommodation of larger earth observation and/or science payloads is required. The SI-200 platform can be combined with SI's EOS-C electro-optical payload to yield a 200 kg class Earth observation small satellite system designed to provide 2 meter level resolution. The SI-200 platform features deck-and-longeron type structural construction permitting easy assembly and disassembly. The interface with the launch vehicle is made through an adapter bolted to the bottom of the structure. The mechanical interface with the electro-optical payload is provided through three points at the satellite middle deck.

The SI-300 platform is the extended version of SI-200 platform. The SI-300 platform can be combined with SI's EOS-D payload to yield a 300 kg class small satellite system for Earth observation providing 1 meter level resolution. It contains a Hall Effect Propulsion System (HEPS) for orbit control and maintenance.

	SI-100	SI-200	SI-300
			
Mass	~100 kg Dry Mass (incl. Payload)	< 200 kg	< 300 kg
Volume	650x600x850 mm 2 deployable panels	1,200 mm diameter, 1,250 mm height, hexagonal 3 deployable panels	1,500 mm diameter 1,950 mm height, hexagonal 4 deployable panels
Power	150 W @ EOL	330 W @ EOL	450 W @ EOL
Attitude Control	Active, 3-axis stabilized		
Communications	S-Band (TT&C), X-Band (Data, QPSK)		
Design Lifetime	3 years	5 years	5 years



Based in Daejeon, Republic of Korea (South Korea), Satrec Initiative (SI) is the one of the world's leading companies in high performance Earth observation small satellite solutions. SI was founded in 1999 by engineers who had developed the first South Korean satellite and a series of advanced small satellites at the Korean Advanced Institute of Science and Technology (KAIST). SI has a successful track record serving more than 20 global customers in the Middle East, Asia and Europe. The company's portfolio of high quality satellite solutions includes integrated turnkey satellite systems, satellite components, platforms, electro-optical instruments, ground stations, satellite operations, image processing and image applications, and spin-off technologies. The company also offers training and consultancy services. SI is publicly listed on the South Korean KOSDAQ exchange.



Based in Washington, D.C., SpaceWorks Commercial, a division of SpaceWorks Engineering, Inc. (SEI), advances innovative ideas, solutions, and partnerships aimed at maturing near and far term commercial and international space ventures. The firm works with entrepreneurial ventures to enhance existing or to facilitate new business opportunities as well providing consulting and advocacy services to help bring space projects to maturation. The division's capabilities include: strategic and quantitative-based insight, technical aerospace systems analysis and design services (utilizing its sister division, SpaceWorks Engineering), financial engineering, and space media. SEI is privately held. SpaceWorks Commercial is an official representative of Satrec Initiative's product lines in the United States.



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