

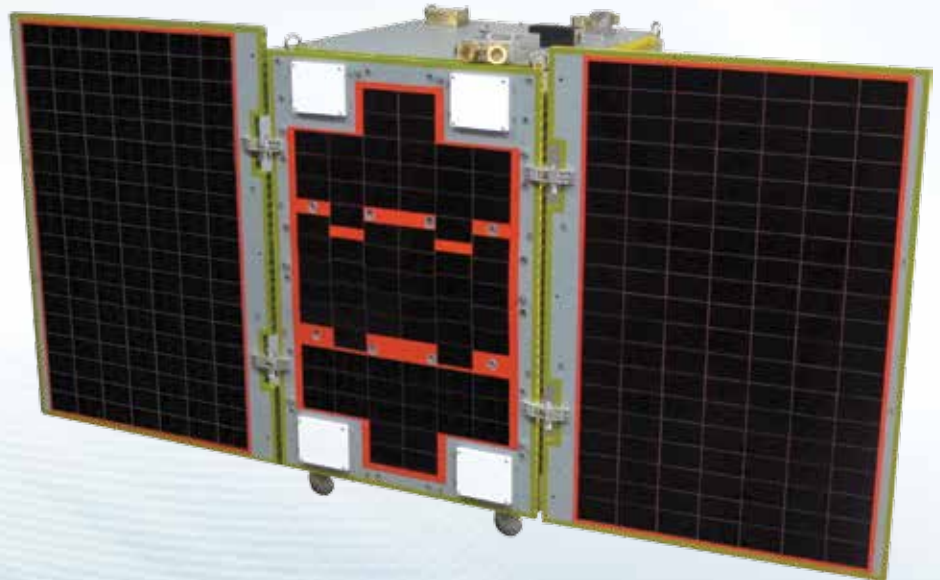
SS-100 Micro-Satellite System

The SS-100 series is a low cost and high performance 100kg class Micro-Satellite system, providing a 12m resolution multi-spectral imaging payload. It is highly reliable, adopting dual redundancy in the system architecture design. The three-axis stabilisation and the high precision GPS receiver offers a high attitude agility control and orbital determination, with increased flexibility and mission-effectiveness.

The SS-100 series platform is robust and highly flexible for customised small sized payloads, and is best suited as a space technology demonstrator, and can serve as a springboard towards space technology and knowledge acquisition.

Key Features

- **Low cost and high performance solution for multiple, earth observation missions**
- **Multi-spectral, electro-optical payload with three multi-spectral bands**
- **Near realtime imaging with high speed data downlink**
- **Increased reliability with adoption of dual redundancy system architecture**
- **Proven design with heritage from X-SAT**

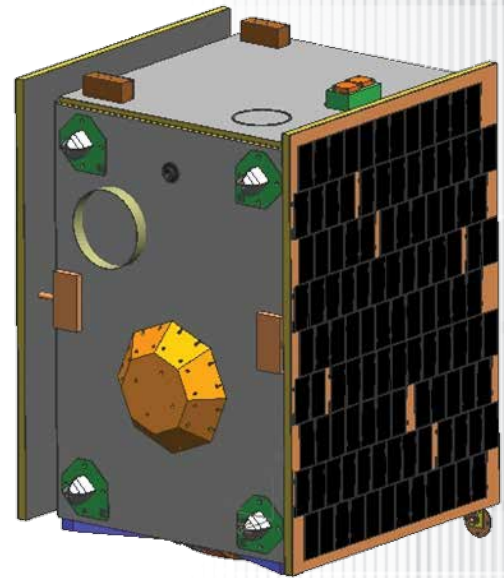


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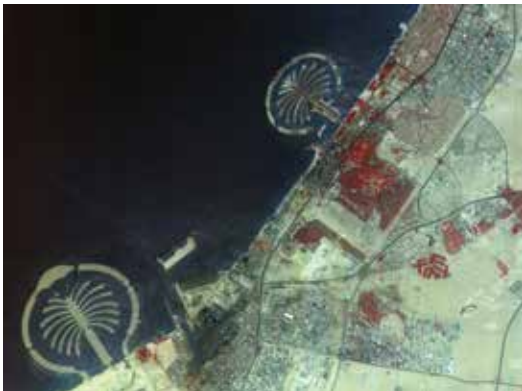
Technical Specifications

Operational Life	3 years
Mass	Configurable up to 120 kg Class
Dimension	600 mm x 600 mm x 800 mm
Imaging Payload	Multi-spectral electro-optical camera with 3 multi-spectral bands
Image Resolution	12m GSD
Spectral Bands	0.52 - 0.60 μm (Green) 0.63 - 0.69 μm (Red) 0.76 - 0.89 μm (NIR)
Image Swath	50 km Swath
Dynamic Range	8 bits
Payload MTF	$\geq 15\%$ (@ Nyquist frequency)
Power	247 W @ End-of-Life
Attitude Control	3 axis stabilised 0.33° (roll & pitch) & 1° (yaw) pointing accuracy
TT&C Link	S-Band; up to 250 Kbps downlink; 4 Kbps uplink
Image Data Link	X-Band multi selectable patch antenna; 50 Mbps



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X-SAT Satellite Images (Courtesy of DSO, SaRC/NTU, CRISP/NUS)



Satellite image of Dubai
(20 August 2012)



Satellite image of Rosario, Argentina
(31 December 2011)

Note: All specifications are subject to change without notice.
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