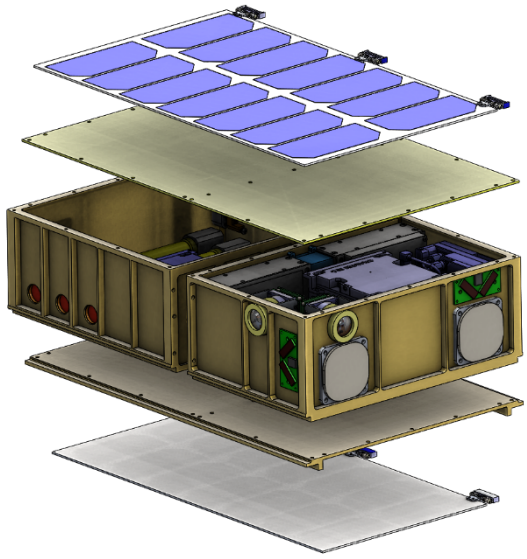
2145 Priest Bridge Dr, Suite 15
Crofton, MD. 21114



MAI-6000

6U CubeSat Bus

The MAI-6000 is a cost effective, flexible, and reliable 6U CubeSat Bus. The MAI-6000 provides users with up to 4,000 cubic centimeters of payload volume as well as a Payload Orbit Average Power (OAP) of 20W. MAI has teamed with Innoflight, Inc. to incorporate their SCR-100 CubeSat Flight Transceiver, which can be configured to downlink at rates of 2.0 Mbps or more in S-Band using either AES-256 or National Security Agency (NSA) approved Type-1 encryption. The MAI-6000 also incorporates the MMA HaWK Solar Array, which can provide either a fixed or single-axis gimbaled solar array configuration. The MAI-6000 comes equipped with our own MAI-400 ADACS which is capable of providing 0.01 degree pointing knowledge and 0.1 degree pointing control using our star tracker. The satellite is compatible with the Planetary Systems Corporation Canisterized Satellite Dispenser (CSD) and can be adapted to other deployers.

Specifications

Performance Item	Specification
Data Interfaces	RS-422 Serial Interface, 5 TTL Discrete Interfaces
Payload Orbit Average Power	20W
Battery	8 Li-Ion Cells => 92 Watt Hours @ 14.4V
Payload Power Interface	Switched 3.3V, 5V, and 12 V DC Regulated Power Supply
Solar Arrays	MMA HaWK or MAI Solar Array (fixed or gimbal)
Attitude Knowledge	0.01 degree (Star Tracker) or 1 degree (Earth Limb Sensor)
Attitude Control	0.1 degree (Star Tracker) or 1.1 degree (Earth Limb Sensor)
Type of Pointing	Multiple pre-programmed pointing modes
Dimensions	10 x 20 x 30 cm (nominal)
System Mass	Up to 16.9 kg (12 kg available for payload)
Payload Volume	Up to 4U
Construction	Machined 7075 and 6061 Aluminum
Mission Design Life	3 years in LEO
Orbit Capability	LEO: 350-850km, 0-98.8 degree inclined orbit
Frequency	S-Band, X-Band, UHF
Downlink	Up to 2.0 Mbps (using S-Band)
Encryption	AES-256 or NSA Type-1 available

410-451-2505
www.maiaero.com