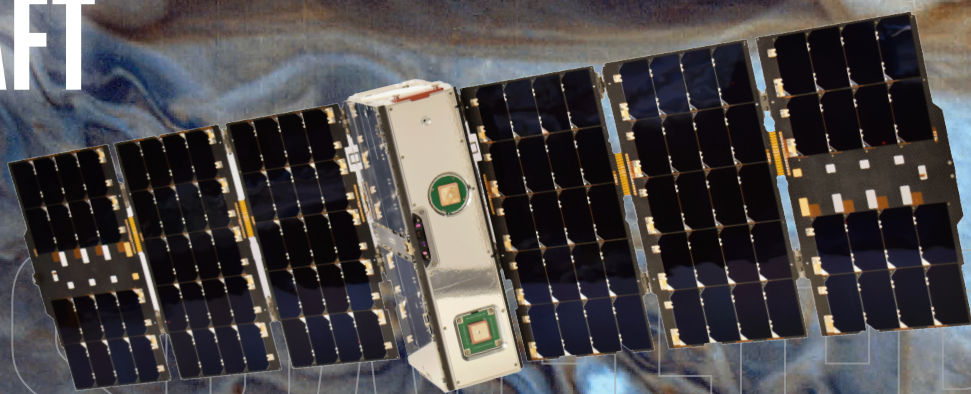




SPACECRAFT BUSES,  
SYSTEMS & SOLUTIONS

# XB6 SPACECRAFT



XB6 SPACECRAFT

**CLASS**  
6U

**AVAILABLE PAYLOAD VOLUME**  
4U (typical)

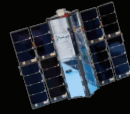
**POINTING ACCURACY**  
 $\pm 0.002^\circ$  (1-sigma), 3 axes, 2 Trackers

**ENERGY STORAGE**  
6.8-20.4 Ah

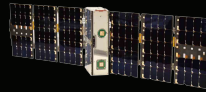
**SOLAR ARRAY POWER**  
92 W - 108 W

**ORBIT ALTITUDE / ORBIT LIFETIME**  
LEO > 5 years | GEO/Lunar/Deep Space > 2 years

# CUBESAT SUMMARY



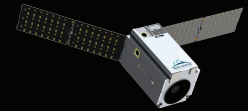
**XB3**



**XB6**



**XB12**



**XB16**

CLASS	3U	6U	12U	16U
AVAILABLE PAYLOAD VOLUME	1.5U (typical)	4U (typical)	8U (typical)	12U (typical)
POINTING ACCURACY	±0.003 deg (1-sigma) for 2 axes; ±0.007 deg (1-sigma) for 3rd axis	±0.002 deg (1-sigma) 3 axes, 2 Trackers	±0.002 deg (1-sigma) 3 axes, 2 Trackers	±0.002 deg (1-sigma) 3 axes, 2 Trackers
POINTING STABILITY	1 arc-sec over 1 sec			
AGILITY	> 10 deg/sec	> 6 deg/sec	> 5 deg/sec	> 3 deg/sec
ORBIT KNOWLEDGE	10m, 0.15 m/s (1-sigma)			
DATA INTERFACES	UART (3.3 V, 2.5 V LVDS, RS-422, RS-485), SpaceWire, 3.3 V In/Out			
ONBOARD DATA STORAGE	4GB with expandable beyond for the 6U, 12U and 16U (by adding the high speed data recorder)			
ENERGY STORAGE	6.8 Ah	6.8 – 20.4 Ah	6.8 – 20.4 Ah	6.8 – 20.4 Ah
SOLAR ARRAY POWER	27 W	92 W - 108 W	92 W - 108 W	92 W - 108 W
PROPULSION	Multiple electric and chemical propulsion systems available			
PAYLOAD POWER	3.3 V, 5.0 V, 12 V, 28 V (available in 6U, 12U and 16U)			
LEO UPLINK	Nominal 100 Kbps, CCSDS formatting			
LEO DOWNLINK	S-Band 2 Mbps standard	S-Band 2 Mbps standard X-Band up to 10 Mbps	S-Band 2 Mbps standard X-Band up to 10 Mbps	S-Band 2 Mbps standard X-Band up to 10 Mbps
ORBIT ALTITUDE / ORBIT LIFETIME	LEO > 5 years   GEO/Lunar/Deep Space > 2 years			

Note: This data is for information only and subject to change. Please contact Blue Canyon Technologies for current design data.



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