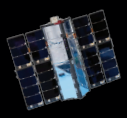
BLUE CANYON TECHNOLOGIES

SPACECRAFT BUSES, SYSTEMS & SOLUTIONS

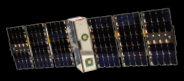
SPACE AWAITS

With our suite of spacecraft technology and services, your team can build, test, launch and operate, all using our line of revolutionary small satellite buses and components.

CUBESAT SOLUTIONS

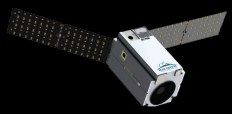


XB3



XB6

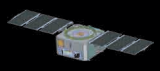
XB12



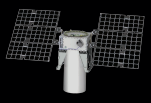
XB16

	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; 1 Tracker	±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
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

MICROSAT & MINISAT SOLUTIONS



MERCURY CLASS
MICROSAT



VENUS CLASS
MICROSAT

SATURN CLASS
MINISAT

	MERCURY CLASS MICROSAT	VENUS CLASS MICROSAT	SATURN CLASS MINISAT
CLASS	11.732” Light Band	ESPA-Standard or large15” launch vehicle interface	ESPA-Grande or Equivalent 24” launch interface standard, other options available
PAYLOAD VOLUME	14.0” X 17.0” X 17.0” (launch dependent)	20.5” X 16.4” X 27.0” (1 array) 17.0” X 16.4” X 27.0” (2 array) Larger volume available depending on launch vehicle	30.0” X 30.0” X 40.0” (typical) Larger volume available within rideshare envelope and in dedicated launch vehicle fairings
POINTING ACCURACY	±0.002° (1-sigma), 3 axes, 2 Trackers		
ENERGY STORAGE	20.4 Ah	10.2 Ah	54.4 Ah
SOLAR ARRAY POWER (BOL)	SADA articulated Arrays 108 W	One wing: 222 W Two wing: 444 W	1082 W

FEATURED COMPONENTS

ATTITUDE CONTROL SYSTEMS
XACT-15

TYPICAL POINTING ACCURACY (1-SIGMA)	±10 arcsec for 2 axes; ± 25 arcsec for 3rd axis
VOLUME	10 x 10 x 5 cm (0.5U)

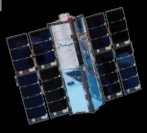
REACTION WHEELS
RWP500

VOLUME	110 x 110 x 38 mm
MAX TORQUE	0.025 Nm

CONTROL MOMENT GYROSCOPES
CMG-12

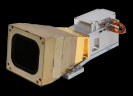
TORQUE	12 Nm
MASS	< 18 kg

SOLAR ARRAYS
3U



SOLAR ARRAY POWER	27 - 34 W
ARRAY VOLTAGE	14.9 VDC

STAR TRACKERS
FULL EXTENSION NST



ATTITUDE KNOWLEDGE	Gen3: 1 asec (cross boresight); 10 asec (around boresight) Gen2: 6 asec (cross boresight); 40 asec (around boresight)
VOLUME	25 x 10 x 10 cm

MISSIONS OPERATIONS

Our vertical integration spans from individual components to mission operations services that manage spacecraft on-orbit. Our customer-driven mission planning and on-orbit tasking allows the customer to focus on the mission while we manage the bus, leveraging our straightforward, agile interfaces.

With more than 24 years of cumulative on-orbit heritage and 50,000+ supported contacts, our Mission Operations team has the expertise you can rely on to support your mission.

OUR MISSIONS

ASTERIA - *NASA JPL*
- **Provided:** XACT ADCS System for XB6 CubeSat bus

BLACKJACK - *Defense Advanced Research Projects Agency (DARPA)*
- **Provided:** Constellation of four Saturn Class buses

INCUS - *Colorado State University and Jet Propulsion Laboratory*
- **Provided:** Constellation of three Venus Class buses

MarCO - *NASA JPL*
- **Provided:** Constellation of three Venus Class buses

METHANESAT - *MethaneSAT, LLC*
- **Provided:** Saturn Class bus

RAVAN - *Johns Hopkins University Applied Physics Laboratory*
- **Provided:** XB3 CubeSat bus, Mission Operations

STARLING - *NASA Ames Research Center*
- **Provided:** Constellation of four XB6 CubeSat buses, Mission Operations

TEMPEST-D - *Colorado State University*
- **Provided:** XB6 CubeSat bus, Mission Operations

TROPICS - *MIT Lincoln Laboratory*
- **Provided:** Constellation of seven XB3 CubeSat buses, Mission Operations

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

REV 3/2024

Scan to learn more