

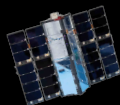


SPACECRAFT BUSES, SYSTEMS & SOLUTIONS

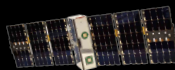
# SPACE AWAITS

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

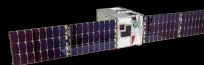
## CUBESAT SOLUTIONS



XB3



XB6



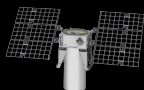
XB12



XB16

CLASS	3U	6U	12U	16U
AVAILABLE PAYLOAD VOLUME	1.5U (typical)	4U (typical)	8U (typical)	12U (typical)
POINTING ACCURACY	$\pm 0.003$ deg (1-sigma) for 2 axes; $\pm 0.007$ deg (1-sigma) for 3rd axis	$\pm 0.002$ deg (1-sigma) 3 axes, 2 Trackers	$\pm 0.002$ deg (1-sigma) 3 axes, 2 Trackers	$\pm 0.002$ 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

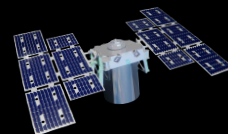
## MICROSAT & MINISAT SOLUTIONS



VENUS-100



SATURN-200



SATURN-400

CLASS	ESPA-Standard or large 15" launch vehicle interface	ESPA-Grande or Equivalent 24" launch interface standard, other options available	ESPA-Grande or Equivalent 4-point mount launch vehicle interface, compliant to SpaceX Rideshare
PAYLOAD VOLUME	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	40.0" x 40.0" x 45.0" (objective) Larger volume available depending on launch vehicle allowable payload volume
POINTING ACCURACY	$\pm 0.002^\circ$ (1-sigma), 3 axes, 2 Trackers		
ENERGY STORAGE	13.26 Ah	54.4 Ah	75 Ah Options for increased energy storage available
SOLAR ARRAY POWER (BOL)	One wing: 222 W Two wing: 444 W	1082 W	1876 W

# FEATURED COMPONENTS

## ATTITUDE DETERMINATION & CONTROL SYSTEMS

XACT-15



SPACECRAFT POINTING ACCURACY (1-SIGMA) ±10 arcsec for 2 axes; ±25 arcsec for 3rd axis

VOLUME 10 x 10 x 5 cm (0.5U)

## CONTROL MOMENT GYROSCOPES

CMG 8



TORQUE 8 Nm

MASS < 13 kg

## REACTION WHEELS

RW16



VOLUME 242 x 242 x 120 mm

MAX TORQUE 0.25 Nm

## SOLAR ARRAYS

3U

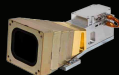


SOLAR ARRAY POWER 27 - 34 W

ARRAY VOLTAGE 15 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. We provide customer-driven mission planning and on-orbit tasking solutions, enabling customers to focus on their mission objectives while we handle all other aspects through robust, flight proven interfaces and processes.

With more than 40+ years of cumulative on-orbit heritage and 90,000 supported contacts, our Mission Operations team has the expertise you can rely on to support your mission.

# OUR MISSIONS

## BLACKJACK

Defense Advanced Research Projects Agency (DARPA)

- **Provided:** Constellation of four Saturn-200 buses

## ORACLE-M

Air Force Research Laboratory

- **Provided:** Custom ESPA-Grande bus

## PAMI-1

Netherlands Ministry of Economic Affairs and Climate

- **Provided:** Saturn-200 bus

## PANDORA

NASA Goddard Space Flight Center and Lawrence Livermore National Laboratory

- **Provided:** Saturn-200 bus, System Integration and Test

## PREFIRE

NASA Jet Propulsion Laboratory

- **Provided:** Two XB6 CubeSat buses

## 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.