



Spacecraft Buses,
Systems & Solutions

X-SAT MICROSAT SPACECRAFT



MICROSAT

CLASS

Up to 250 kg

AVAILABLE PAYLOAD VOLUME

45 x 45 x 80 cm

POINTING ACCURACY

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

ENERGY STORAGE

300Whr

SOLAR PANELS

400W

MASS / VOLUME FOR AVIONICS

25 kg / 40 cm x 40 cm x 20 cm

XACT-BUS NOMINAL POWER

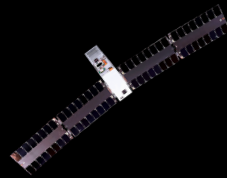
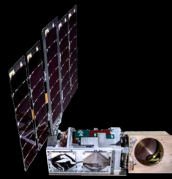
< 10W (Excluding RF Comm)

ORBIT ALTITUDE / ORBIT LIFETIME

LEO > 5 years | GEO > 2 years



SPACECRAFT SUMMARY



XB3

XB6

XB12

MICROSAT

CLASS	3U	6U	12U	Up to 250 kg
AVAILABLE PAYLOAD VOLUME	1.5U (typical)	4U (typical)	10U (typical)	45 x 45 x 80 cm
POINTING ACCURACY	±0.002° (1-sigma), 3 axes, 2 Trackers			
POINTING STABILITY	1 arc-sec over 1 sec			
MANEUVER RATE	10 deg/sec (typical)	5 deg/sec (typical)	5 deg/sec (typical)	5 deg/sec (typical)
ORBIT KNOWLEDGE	4m, 0.05m/s	4m, 0.05m/s	4m, 0.05m/s	4m, 0.05m/s
DATA INTERFACES	Serial, LVDS, Spacewire, HDLC, I2C or SPI available			
ONBOARD DATA STORAGE	8 Gbytes	8 Gbytes	8 Gbytes	128 Gbytes (1 TB option)
SYSTEM BUS VOLTAGE	9 – 23 V (battery and array dependent)	9 – 23 V (battery and array dependent)	9 – 23 V (battery and array dependent)	9 – 36 V (battery and array dependent)
ENERGY STORAGE	75Whr	75-185Whr	75-185Whr	300Whr
SOLAR PANELS	35W	118W	118W	400W
HIGH CURRENT CAPABILITY	Unregulated up to 60W	Unregulated up to 140W	Unregulated up to 140W	Sized for program specific needs
FREQUENCY	UHF, Sband, Xband			
UPLINK	Nominal 100 Kbps, CCSDS formatting			
DOWNLINK	Up to 15 Mbps	Up to 15 Mbps	Up to 15 Mbps	150 Mbps option
MASS / VOLUME FOR AVIONICS	1.5 kg / 10 cm x 10 cm x 14 cm	1.5 kg / 10 cm x 10 cm x 14 cm	2.0 kg / 10 cm x 10 cm x 20 cm	25 kg / 40 cm x 40 cm x 20 cm
XACT-BUS NOMINAL POWER	< 6.3W (Excluding RF Comm)	< 6.3W (Excluding RF Comm)	< 6.3W (Excluding RF Comm)	< 10W (Excluding RF Comm)
ORBIT ALTITUDE / ORBIT LIFETIME	LEO > 5 years GEO > 2 years			
SCALE				

Our family of XB Spacecraft offers complete end-to-end solutions for your mission needs. Featuring an extremely precise, highly powerful integrated spacecraft bus platform — ranging from a 3U CubeSat to an ESPA-class satellite — our versatile systems are built to accommodate any and all types

of missions. With robust power systems, secure data handling, and resilient performance, our suite of solutions are time-tested and proven-reliable, even under the harshest of conditions. Get ready for a new era of peak-performance, cost-efficient spacecraft solutions.