



Spacecraft Buses,
Systems & Solutions

POWER SYSTEMS

* Sold as part of our XB Satellites



*Microsat
Solar Array
with BCT SADA*

Our high-performance power systems are available for implementation across CubeSats, Nanosats and Microsatellites, and offer all elements of an electrical power system (solar arrays, batteries, power distribution and charge control electronics). These systems can be stand-alone, or a peripheral to the XB1 controller board.

SOLAR ARRAYS

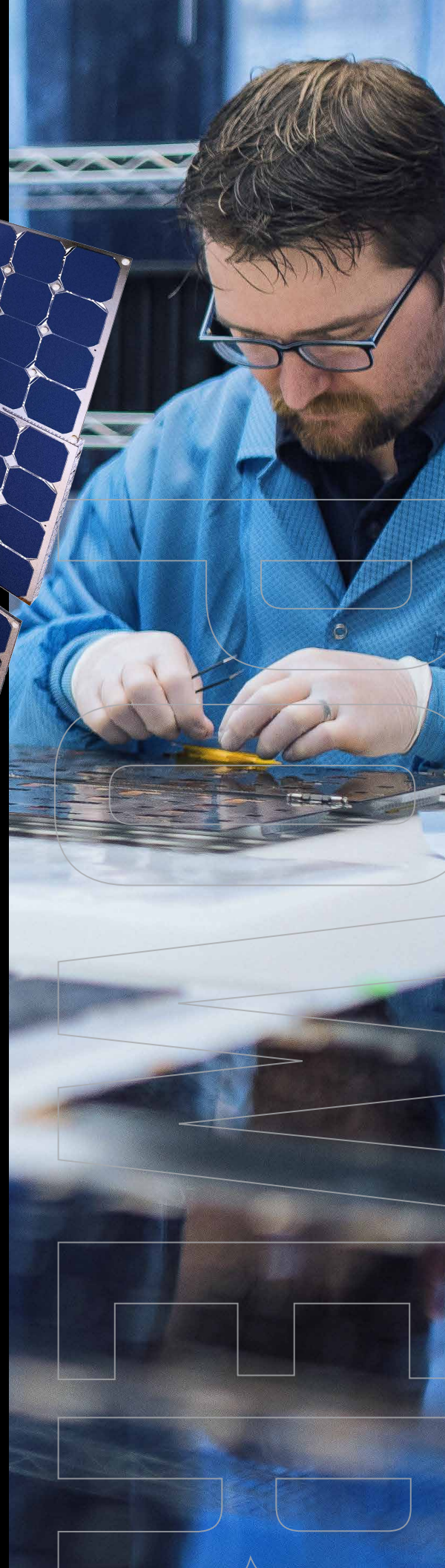
We offer configurations ranging from simple body mounted panels to multi-wing deployed arrays with the option to gimbal up to two axes. Our standard arrays include 29.5% efficient cells and carbon fiber substrates, with custom options available.

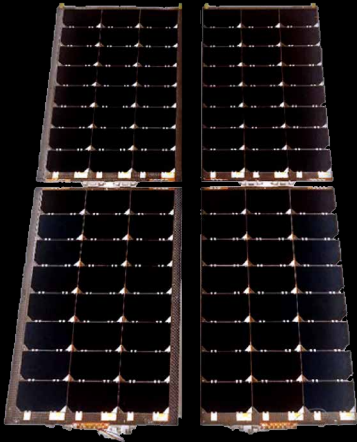
POWER CONTROL

Functionality is included for solar array input power, on-board or external battery, charge control (Peak Power or Direct Energy), power regulation and distribution, and data acquisition. Additional features include: charge and distribution fault protection, modular architecture for storage and generation capability, and heater controllers for spacecraft use.

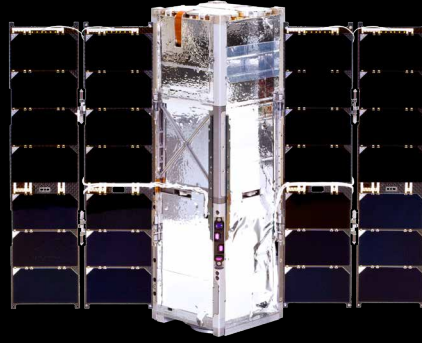
BATTERIES

We support Li-Ion or LiFePo4 battery chemistries. Our standard battery voltages range from 12VDC to 48VDC with available custom options. Standard protection features include: under temperature (hardware set), cell balancing, under voltage and over voltage.

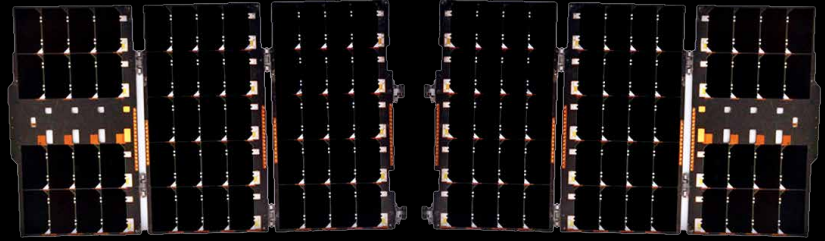




BCT 6U-V Double Wing Solar Array
101W per 6U



BCT 3U Double Wing Solar Array
28W per 3U



BCT 6U-H Triple Wing Solar Array
118W per 6U

POWER SYSTEMS

NOMINAL PARAMETERS	3U	6U/12U	MICROSAT
SOLAR ARRAY POWER (W)	35	118	400
BUS VOLTAGE (VDC)	9-23	9-23	9 to 36
HIGH CURRENT CAPABILITY (W)	Unregulated up to 60W	Unregulated up to 140W	Size for program specific needs
ENERGY STORAGE (WHR)	75	75-185	300

FEATURES INCLUDE:

- Solar Arrays – 29.5% efficient, Carbon Fiber Substrate, Multiple Deployment Configurations, Array Articulation
- Release Mechanism – BCT Built Resettable Release Mechanism, up to 4 deployments with one actuation
- Solar Array Drive Assemblies – BCT-built solutions for 3U, 6U, 12U and Microsat spacecraft
- Batteries – Li-Ion or LiFePo4 chemistries, custom packaging available



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