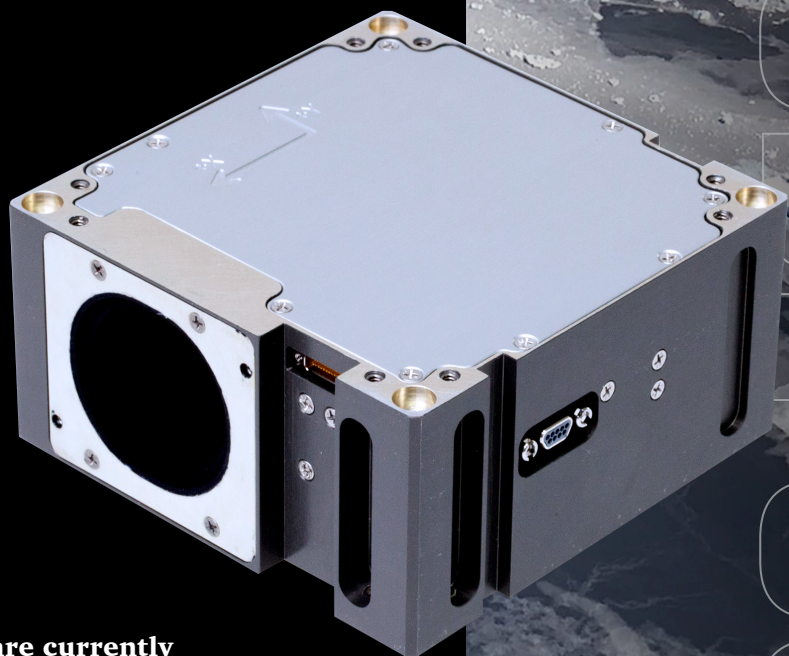**BLUE CANYON**
TECHNOLOGIES

*Spacecraft Buses,
Systems & Solutions*
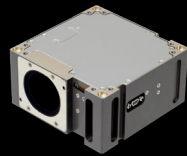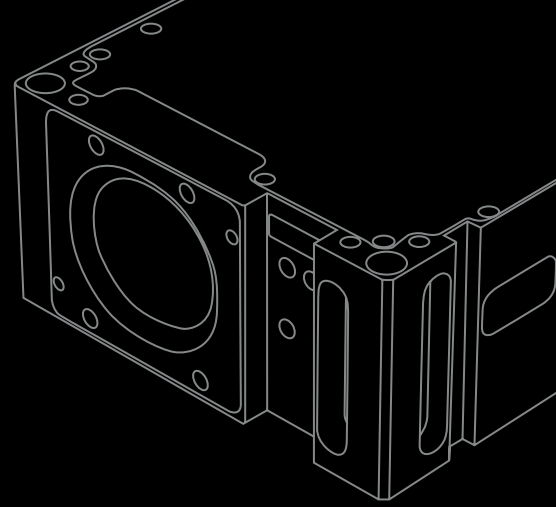
ATTITUDE CONTROL SYSTEMS

Our XACT and FleXcore products are currently operating on-orbit, supporting numerous successful customer missions.

Get reliable, high-performance design compatible with a wide range of satellite configurations, all from the most accurate stellar-based attitude solutions. A powerful processing core coupled with our Micro-Reaction Wheel assemblies enable a new generation of peak-performance, cost-efficient miniaturized spacecraft.
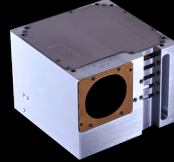
FEATURES INCLUDE:

- Precise attitude knowledge & control
- Complete ADCS in a Micro-package
- Low jitter micro-reaction wheel design
- User-friendly software supports simulation, integration, and customization
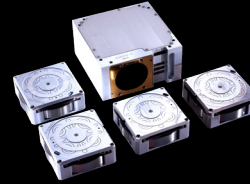
ATTITUDE CONTROL SYSTEMS

	XACT-15	XACT-50	XACT-100	FLEXCORE
SPACECRAFT POINTING ACCURACY	±0.003 deg (1-sigma) for 2 axes; ±0.007 deg (1-sigma) for 3rd axis	±0.003 deg (1-sigma) for 2 axes; ±0.007 deg (1-sigma) for 3rd axis	±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
MASS	0.885 kg	1.23 kg	0.520 kg + 1 kg (wheels)	Configuration Dependent
VOLUME	10 x 10 x 5 cm (0.5U)	10 x 10 x 7.54 cm (0.75U)	10 x 10 x 5 cm (0.5U) (not incl. external components)	< 12.1 x 11.4 x 4.9 cm (not incl. external components)
ELECTRONICS INPUT VOLTAGE	12V	12V	12V	5V and 28V
TYPICAL DATA INTERFACE	RS-422			
SLEW RATE	≥10 deg/sec (4kg, 3U CubeSat)	≥10 deg/sec (14kg, 6U CubeSat)	≥10 deg/sec (25kg, 12U CubeSat)	Application Dependent
SPACECRAFT LIFETIME	5 Years (LEO)			
MOMENTUM	15 mNms	50 mNms	100 mNms	Between 0.5 and 8 Nms *depending on which wheels are used