

Elevation™ and Evolve™

Spacecraft Solutions

As a trusted mission partner, we deliver reliable spacecraft solutions to meet your mission needs. Our Elevation line provides a range of standardized, high-performing spacecraft products. With three variants, Summit™, Trek™ and Ascent™, you can choose the best fit for your mission. Our Evolve line provides configurable spacecraft solutions based off proven building blocks in single or dual string options. Evolve meets the highest performance requirements and mission needs.



Best Value | Mission Ready | Versatile

BAE SYSTEMS

Elevation

Summit

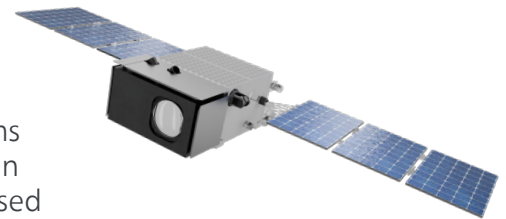
The Summit spacecraft is an ideal choice for rideshare or multi-vehicle missions. Summit features an in-house BAE Systems avionics package and supports the baseline capabilities in the table below. In addition, defined mission accommodation packages are available for increased mission flexibility.



Parameter	Spacecraft Capability	Parameter	Spacecraft Capability
Payload mass (kg)	Up to 225kg	Comm	S-band for TT&C X-band mission comms NSA Type-1 and AES-256 Crypto options
Payload power (orbit avg, EOL, watt)	400 to 850W (28 VDC)	Pointing Performance (1σ)	Accuracy: <7 arcsec Knowledge: <4 arcsec Stability: <1 arcsec/1sec
Payload volume (l x w x h, meters)	2x1x0.4-0.75 meters typical (LxWxH)	Design life (yr)	5 years
Launch service compatibility	Designed to accommodate rideshares, compatible with dedicated launch	Redundancy	Single-string w/selective redundancy
Orbits	400 to 1000 km, 40 deg to SSO	Schedule	Supporting schedules as fast as 18 months from ATP to first bus delivery
Propulsion	Electric propulsion included > 380 m/s ΔV		

Trek

The Trek spacecraft provides increased flexibility with the payload interface, enhanced attitude determination and control system, and increased communication capabilities. Trek features an in-house BAE Systems avionics package and supports the baseline capabilities in the table below. In addition, defined mission accommodation packages are available for increased mission flexibility.



Parameter	Spacecraft Capability	Parameter	Spacecraft Capability
Payload mass (kg)	Up to 1000 kg	Pointing Performance (1σ)	Accuracy: <10 arcsec Knowledge: <5 arcsec Stability: 1 arcsec/1sec
Payload power (orbit avg, EOL, watt)	Up to 1900W (28 VDC)	Design life (yr)	5 years
Launch service compatibility	Dedicated or multi-launch with up to 6 Trek space vehicles	Redundancy	Single-string w/selective redundancy
Orbits	LEO: 400 to 1000 km, 40 deg to SSO MEO option	Specialty engineering	Designed for compatibility with MEO environments Supports payload thermal isolation or dissipation of up to 650W through the bus Designed for EMI quiet operation
Propulsion	Chemical and Electric Prop options > 200 m/s ΔV for Chemical > 550 m/s EP	Schedule	Supporting schedules as fast as 18 months from ATP to first bus delivery
Comm	S/L-band for TT&C X-band, Ka-band, and Optical mission comms options NSA Type-1 and AES-256 Crypto		

Ascent

Ascent supports dynamic space operations with enhanced versatility, thanks to its high maneuverability, high thrust propulsion, and multiple-payload hosting capabilities. Additionally, its refuellability and key features—including multi-mission mobility, multi-manifest launch, and rendezvous, proximity operations, and docking—make it an ideal platform for a wide range of space missions.



Parameter	Spacecraft Capability	Parameter	Spacecraft Capability
Payload mass (kg)	Up to 2200 kg	Comm	S/L-band for TT&C X-band, Ka-band, and Optical mission comms options NSA Type-1 and AES-256 Crypto options
Payload power (orbit avg, EOL, watt)	Up to 2700W (28 VDC)	Pointing Performance (1σ)	Accuracy: <20 arcsec Stability: 1 arcsec/1sec
Payload volume (l x w x h, meters)	1.7 x 1.8 x 3m w/ ports for secondary payloads	Mission life (yr)	5 years
Launch service compatibility	Dedicated, up to 2 space vehicles per launch in standard fairing	Redundancy	Block redundant to disposal, selective redundancy
Orbits	LEO, MEO, GEO, Cislunar	Schedule	Modular packages to support increased ΔV and secondary payload accommodation
Propulsion	Refuellable chemical propulsion Up to 1500 m/s ΔV , 6DOF control		

Evolve

Evolve

Unconstrained by the limits of one design, we efficiently and quickly configure our single string design with proven building blocks to suit mission requirements. Evolve's added flexibility is best for missions with moderate to high performance needs.



Evolve+

Evolve+ is designed to support high performance and exquisite, higher class missions, meeting the most stringent of customer requirements. Core avionics and flight software are highly capable and configurable for fault management, autonomy, and existing interfaces to various sensors and actuators. Evolve+ is well-suited to large instrument suites and high availability operational missions.

Both Evolve and Evolve+ support unique and challenging mission requirements including, but not limited to:

- Unique payload accommodations
- Exquisite pointing performance
- High agility spacecraft capabilities
- High-delta-V spacecraft capabilities to support cis-lunar, MEO and GEO orbits with accommodation for mobility, logistics, and spacecraft hosting
- Rendezvous, proximity operations, and docking



Summit

Summit is an ideal choice for rideshare or multi-vehicle missions.

Key features:

- Supports payloads up to 225 kg
- 850 watts orbit average power
- Precision pointing
- Disturbance and thermal isolation to meet various mission needs

Trek

Trek provides increased flexibility with the payload interface, enhanced ADCS, and increased communication capabilities.

Key features:

- Supports payloads up to 1000 kg
- Up to 1900 watts orbit average power
- EMI mitigation
- Precise pointing
- Disturbance and thermal isolation

Ascent

Ascent offers high maneuverability, high thrust propulsion, multiple-payload hosting and refuel-ability, offering enhanced versatility for enhanced space operations.

Key features:

- Multi-mission mobility
- Multi-manifest launch
- Rendezvous, proximity operations and docking

Evolve

Evolve is our configurable spacecraft solution. We work collaboratively with our customers to build spacecraft solutions that meet specific mission requirements.

Key features:

- Modular building blocks for efficient configuration
- Suitable for moderate to high performance missions
- Offers flexibility and adaptability

Evolve+

Evolve+ is designed to support high performance missions while providing extended mission life, meeting the most stringent of customer requirements.

Key features:

- Advanced fault management and autonomy
- Compatible with various sensors and actuators
- Suitable for large instrument suites and high-availability missions

Elevation

Evolve

