

STARLING

Product, configuration, and pricing inquiries:
sales@benchmark-space.com

CubeSat Warm gas Thruster

Product Highlights

Benchmark Space Systems' *Starling* system offering was developed to provide the benefits of reliable, high-precision positioning and control capability with unprecedented **safety and affordability**.

This innovative system uses inert, non-toxic powdered fuel that is filled before shipping and remains inert until a pressurization command is triggered on-orbit. The ability to fill, ship, store, and inhibit an assembled & fueled Starling is "a game changer" for **lowering launch manifest and operational costs**, improving safety and reliability over alternatives, and providing a path to ISS compatibility.

Additive manufacturing on primary components delivers **unbeatable lead time**, making this the premier propulsion solution for your next CubeSat mission.

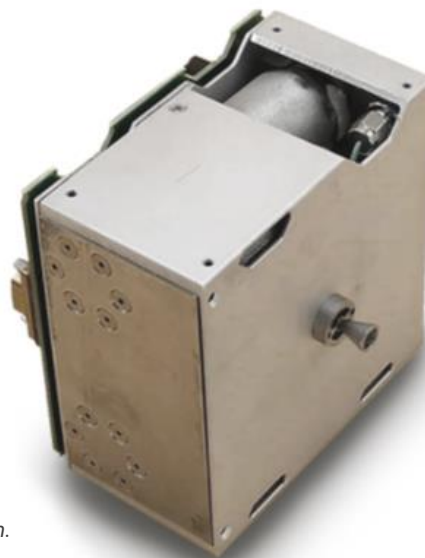
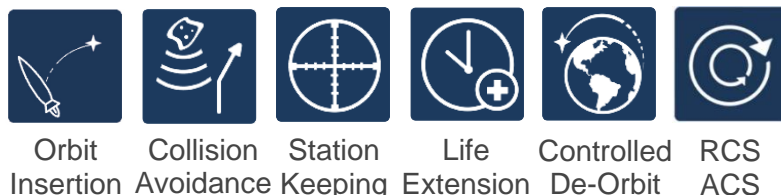


Illustration:
0.5 U configuration.

Applications



STARLING Configurable for 1U – 24U CubeSats

Thruster Size(s)	10 mN - 1 N	Min Impulse	≤ 0.05 mN·s
Non-toxic Propellant	Inert, solid	Power (pressurization)	15 W
Specific Impulse (hot)	105 - 140 s	Power (resistojet)	15 - 100 W
Specific Impulse (cold)	70 s	Power (thrust valve)	< 3 W

Common Configurations

(Configurable to 2500 N·s)

	0.5 U	1 U	2 U
Volume	0.5 U	1 U	2 U
(hot) Total Impulse	75 N·s	180 N·s	430 N·s
(cold) Total Impulse	40 N·s	100 N·s	240 N·s
Wet Mass	750 g	1500 g	2700 g