

## SmallSat Bipropellant Thruster

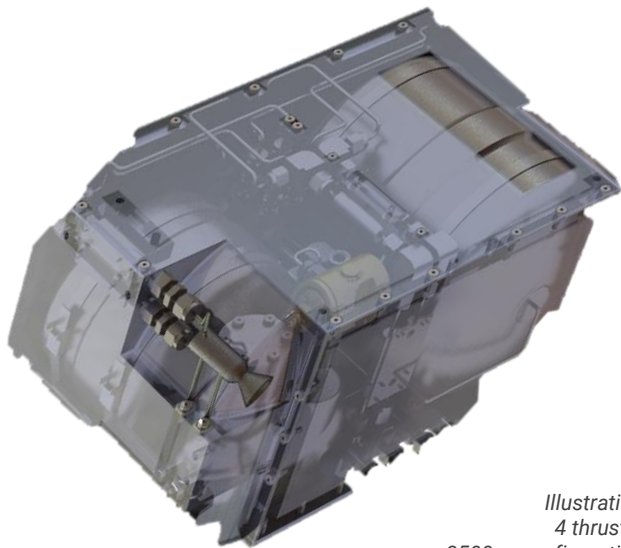


Illustration:  
 4 thruster,  
 3500cc configuration.

### Product Highlights

Benchmark Space Systems' Peregrine delivers a **non-toxic ('green'), high thrust** propulsion system to the small satellite market. Our innovations address challenges with alternative systems in this class: lead time, launch safety, and power consumption.

Our proprietary on-demand pressurization technology and non-toxic propellants will **ease your launch manifest and expand your on-orbit capabilities**. Additionally, Benchmark Space's patent pending micromixing technique eliminates the need for catalyst beds, a high cost, long-lead component used in other chemical propulsion systems.

With in-house components designed for additive manufacturing, Benchmark offers an **industry-best performance and value**.

### Applications

Orbit Insertion	Collision Avoidance	Station Keeping	Orbit Transfer	Life Extension	RPO & Services

### Peregrine Configurable for 6U - ESPA satellites

<b>Thruster Size(s)</b>	250 mN - 22 N	<b>Nozzle Configuration</b>	1 to 12
<b>Non-toxic Propellant</b>	HTP + NHMF	<b>Power (pressurization)</b>	15 W
<b>Specific Impulse</b>	270 - 300 s	<b>Power (standby)</b>	< 0.1 W
<b>Min Impulse Bit</b>	≤ 300 mN·s	<b>Power (thrust valve)</b>	< 3 W

**Common Configurations**  
 (Configurable to 200 kN·s)

**Volume** 2000 cc  
**Total Impulse** 1750 N·s  
**Wet Mass** 2500 g

**Volume** 3500 cc  
**Total Impulse** 3500 N·s  
**Wet Mass** 4000 g

**Volume** 7800 cc  
**Total Impulse** 10,000 N·s  
**Wet Mass** 7500 g

