BHT-8000
Busek
Hall Effect Thruster

BUSEK
Space Propulsion and Systems

Efficient and high-performance propulsion system designed for use with xenon and iodine propellants.

Busek's BHT-8000 is a 8kW (nominal) Hall Effect thruster with state-of-the-art center mounted cathode and performance unparalleled within its power class. The center-mounted cathode precludes performance degradation and outperforms many other competitive designs. The BHT-8000 is a mature propulsion system featuring high performance and compatibility with flight proven heritage components (cathodes, PPUs, and feed systems). The BHT-8000 offers high performance over long-life and operation on xenon or iodine propellants.

The BHT-8000 combines precise control of magnetic field distribution and a short acceleration zone to provide high efficiency and high total impulse. The BHT-8000 produces 449mN thrust at 8,000W power and a specific impulse of 2,210 seconds.

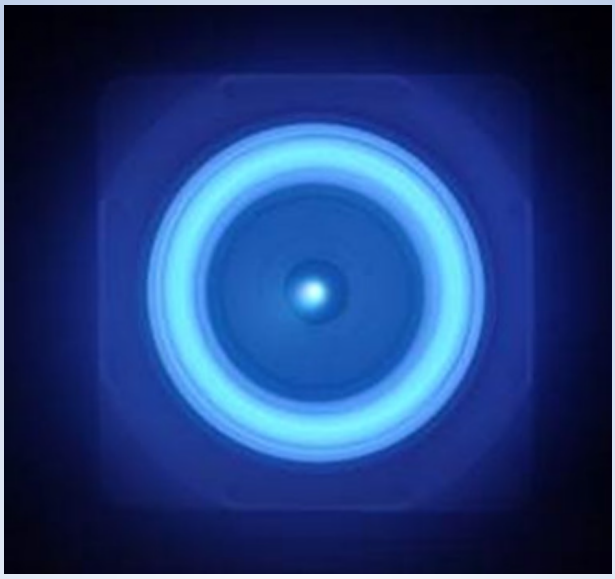
Busek provides Hall Effect thruster configurations in circular, clustered, racetrack, and nested arrangements. Busek Hall Effect thrusters operate with plasmas composed of various elements, from xenon to advanced high-energy solids. Busek research has developed metallic propellants for in-situ resource utilization that can dramatically benefit interplanetary missions.

Busek provides complete and fully integrated Hall Effect thruster systems, including cathode, power processing unit, digital control unit, and propellant management systems.

BHT-8000 Hall Effect Thruster

BHT-8000 System
Technical Specifications

Throttle Range	4kW - 10kW	
Nominal Discharge Power	8kW	
Nominal Voltage	400V	800V
Thrust	449mN	325mN
Specific Impulse	2,210 s	3,060 s
Propellant	xenon, iodine, krypton	
Cathode	BHC-5000	
Cathode Location	Internal Center Mounted	
Thruster Mass	25 kg	
Cathode Mass	0.4 kg	



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