

Busek Low Power Hall Thrusters

BUSEK
Space Propulsion
and Systems

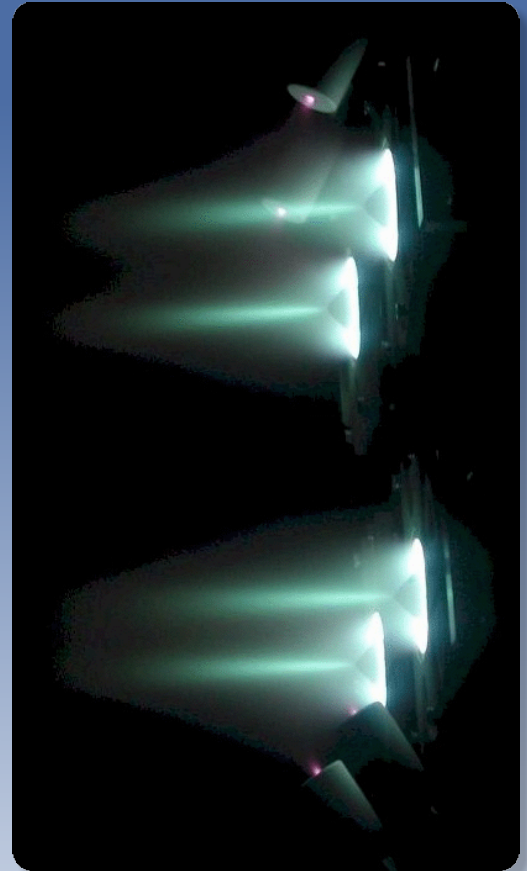


*Busek's low power Hall Effect Thrusters span between 100 and 1500 W
Typical low power Isp range: 1100 to 2000 s*

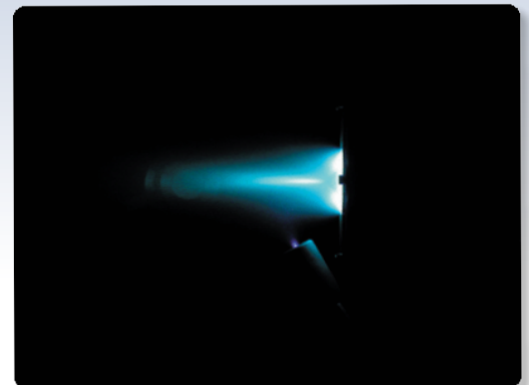
Busek Co. has been developing next generation high performance electric propulsion systems. Our family of U.S.-designed Hall effect thrusters spans the power spectrum from 100 W to 20 kW and produce 5 mN to 1 N of thrust with specific impulse values varying between 1,000 and 3,000 seconds. Our designs embody patented features, combined with precise control of the magnetic field distribution and a short acceleration zone that result in thrusters with high propulsive efficiency and high total impulse.

Busek has studied various Hall thruster configurations, including circular, clustered, racetrack, and nested. Busek has also used Hall thrusters to create plasmas composed of various elements / propellants ranging from traditional propellants such as Xenon to advanced, high-energy propellants. Busek has also studied metallic propellants for in-situ resource utilization that can dramatically benefit interplanetary missions.

As part of Busek's electric propulsion capability, the company offers its customers complete, fully integrated propulsion systems that include the Hall effect thrusters, cathodes, power processing and digital control units, and propellant management systems.



Cluster of 4 BHT-200 thrusters under test at Busek



BHT-200 thruster under test at Busek

Low Power Hall Effect Thrusters

Technical Specifications

BHT-200



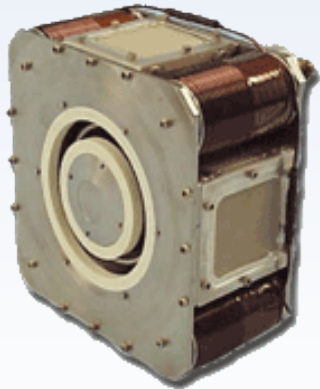
Designation	BHT-200
Input Power Range	100 - 300 W
Thrust (at Nominal Power)	13 mN (at 200W)
Nominal Total Specific Impulse	1390 s

BHT-600



Designation	BHT-600
Input Power Range	300 - 800 W
Thrust (at Nominal Power)	39 mN (at 600W)
Nominal Total Specific Impulse	1585 s

BHT-1000



Designation	BHT-1000
Input Power Range	500 - 1500 W
Thrust (at Nominal Power)	58 mN (at 1000W)
Nominal Total Specific Impulse	1750 s

About Busek Co, Inc

Busek Co., Inc. is an engineering-focused space propulsion company that provides a wide range of thrusters, electronics, research and complete mission and system engineering support. Busek's flight heritage includes: FalconSat-5, Lisa Pathfinder, TacSat-2, and FalconSat-3.