BHT-200
Busek
Hall Effect Thruster

BUSEK
Space Propulsion and Systems

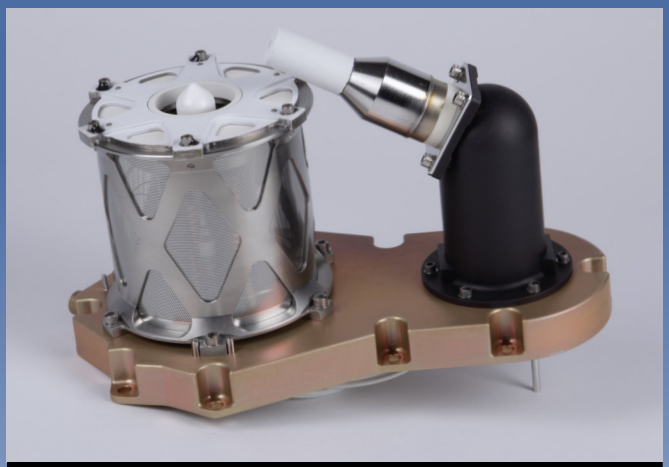
High performance and mature propulsion system with flight heritage, and the first US Hall effect thruster in space.

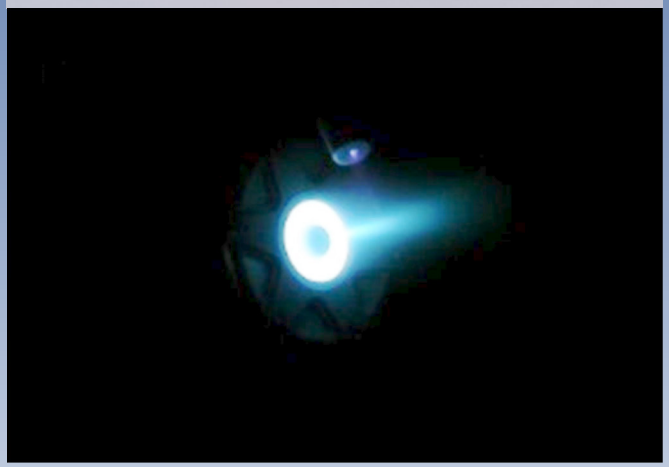
The BHT-200 is a high performance and mature propulsion system with flight heritage aboard the Air Force Research Laboratory's TacSat-2 and FalconSat-5 satellites. The BHT-200 combines precise control of magnetic field distribution and a short acceleration zone to provide high efficiency and high total impulse. The BHT-200 produces 13mN thrust at 200W power and a specific impulse of 1,375 seconds.

The BHT-200 Hall Effect thruster is Busek's flagship commercial product and is the most extensively studied US Hall Effect thruster. The BHT-200 is the first US-designed and US-built Hall Effect thruster used in-space on operational satellites, and is subject of numerous technical papers and journal publications. The BHT-200 is a patented design covered under "Tandem Hall Field Plasma Accelerator," US Patent No. 6,150,764.

Over 20 units of the BHT-200 have been built and delivered for broad range of characterization, plume studies, clustering and modeling efforts, including three flight systems: TacSat-2, FalconSat-5 and FalconSat-6. Busek has a pending flight order for two iodine compatible versions of the thruster for MSFC iSat mission.

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



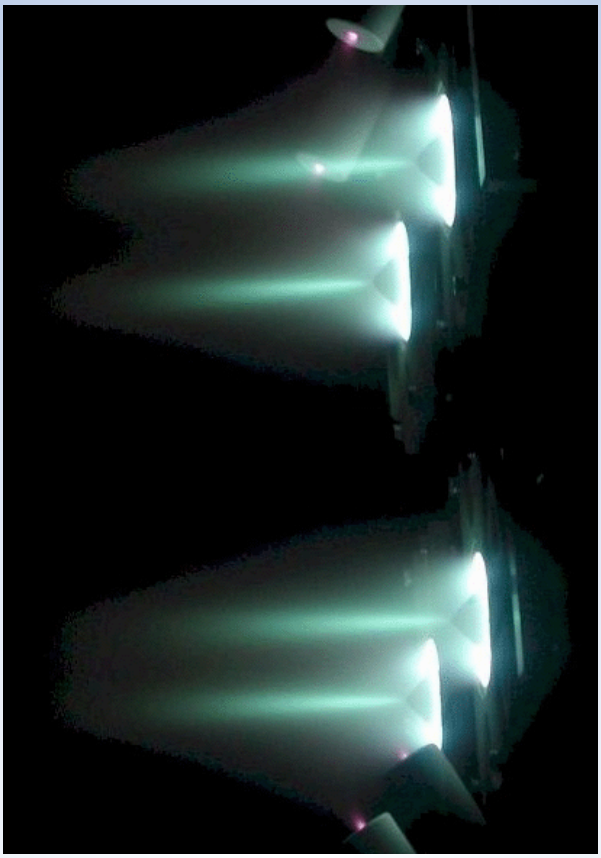


BHT-200 Hall Effect Thruster

BHT-200 Integrated on FalconSat-5

BHT-200 System
Technical Specifications

Nominal Discharge Power	200W
Nominal Voltage	250 VDC
Thrust	13 mN
Specific Impulse	1,375 seconds
Propellant	xenon, iodine, krypton
Cathode	BHC-1500
Cathode Location	External
Thruster Mass	1 kg
Cathode Mass	0.2 kg



Multiple BHT-200 in a Cluster

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