

NEWSPACE MARKET · COMPANY PROFILE



Busek Co.

United States · founded 1985 · busek.com

20

PRODUCTS

18

WITH DATASHEETS

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as of 26 August 2026

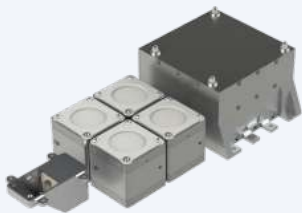


Busek Co.

Busek Co. Inc. designs, develops, and manufactures electric propulsion thrusters, power electronics, and material science components for space applications. The company specializes in Hall thrusters, electrospray thrusters, RF ion thrusters (iodine-fueled), and green monopropellant thrusters (ASCENT-fueled). They also provide electronics, space systems, research, and complete mission and system engineering support. Their customers include major aerospace primes, NASA, the US Air Force, and commercial satellite operators. Busek was founded in 1985 by Dr. Vlad Hruby. Their headquarters and manufacturing facilities are located in Natick, MA, USA, with over 33,000 square feet of space. Busek has a flight heritage dating back to 2006 with a 200W Hall thruster on TacSat-2. Other flight heritage includes hardware for AFRL TacSat-2, USAFA FalconSat-3, FalconSat-5, and NASA/ESA LISA Pathfinder. They licensed Hall thruster technology to Aerojet Corp. for the BPT-4000 Hall thruster used on Advanced EHF satellites. Upcoming missions include providing four BHT-6000 thrusters for NASA's Artemis mission. Busek is AS9100 and ISO 9001 certified, and their products are exclusively manufactured and assembled in the USA.

This profile is generated from the live NewSpace Market catalogue. Specifications are as published by the manufacturer; every product links to a page where a request for quotation reaches the company directly.

Product catalogue



BUSEK CO.
BET-MAX Electro spray Thruster System

Multi-axis precision electro spray propulsion system (BET-300P thrusters) for ultra-precise attitude/orbital control down to 1U platforms.

Thruster module	BET-300P passively-fed electro spray thruster, 125 cm ³
Thrusters per PPU	Up to 4
Thrust range	< 1 μN to 150 μN, sub-μN resolution
Impulse per module	> 100 N·s
Neutralizer	Carbon Nanotube Field Emission Cathode (CNTFEC), propellant-less
Interface	RS-422 digital control
Minimum platform size	3U

price on request



BUSEK CO.
BGT-X5

Busek's BGT-X5 is a 0.5N green monopropellant thruster system delivering 565 N·s of total impulse within a 1U CubeSat volume, using the stable ASCENT propellant as a hydrazine alte

Propellant	ASCENT
Thrust	500 mN nominal
Specific impulse	220-225 s
Total impulse	565 N·s
System power	20 W
Supply voltage	6-16 VDC
Nominal voltage	12 VDC

price on request datasheet



BUSEK CO.
BGT-X5 Green Monopropellant Thruster

Busek's Green Monopropellant Thrusters feature a patented monolithic catalyst that is efficient yet extremely robust, with available thruster sizes ranging from 0.1N to 22N class.

System Power	20 W
Input Voltage	6-16 VDC (nominal 12 V)
Interface	RS-422
Propellant	ASCENT
Thrust	500 mN nominal
Specific Impulse	220-225s
Total Impulse	565 N·s

price on request datasheet



BUSEK CO.
BHT-100

The BHT-100 is a compact, magnetically shielded Hall thruster designed for small spacecraft, offering high efficiency and a predicted lifetime of 10,000 hours or more.

Discharge power	100 W
Supply voltage	200 VDC
Thrust	7 mN
Specific impulse	1000 seconds
Propellants	Xenon, Iodine
Diameter	8 cm
Length	5.5 cm

price on request datasheet



BUSEK CO.

BHT-100

Compact and versatile, the BHT-100 Hall Thruster is precisely engineered for leading-edge propulsion to enable a new class of spacecraft missions.

Input Power	100 W
Thrust	7 mN
Specific Impulse	1000 s
Demonstrated Impulse	45 kN·s
Total Impulse	>250 kN·s

[price on request](#) [datasheet](#)



BUSEK CO.

BHT-1500

The BHT-1500 is a 2kW-class Hall Effect thruster featuring an innovative center-mounted cathode, designed for efficient and high-performance propulsion using xenon, krypton, or iodine

Nominal discharge power	1,500 W
Discharge power range	1,000-2,700 W
Nominal thrust	101 mN (Xe)
Propellants	Xenon, Krypton, Iodine
Nominal specific impulse	1710 seconds
Demonstrated impulse	Pending
Predicted total impulse	>6.5 MN·s

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BUSEK CO.

BHT-200

The BHT-200 is a high-performance, mature Hall effect thruster with flight heritage, designed for spacecraft propulsion and capable of operating with various propellants including

Specific impulse	1390 seconds
Demonstrated impulse	74.88 kN·s
Predicted total impulse	>140 kN·s
Discharge power	200 W
Supply voltage	250 VDC
Thrust	13 mN
Flight heritage	TacSat-2, FalconSat-5, FalconSat-6

[price on request](#) [datasheet](#)



BUSEK CO.

BHT-20K

The BHT-20K is Busek's highest power Hall thruster to date, designed for high-power space missions and capable of delivering 1 Newton of thrust.

Discharge power	20,000 W
Supply voltage	450 VDC
Thrust	1006 mN
Propellants	Xenon, Krypton, Iodine
Specific impulse	2515 seconds
Demonstrated impulse	Pending
Predicted total impulse	>35 MN·s

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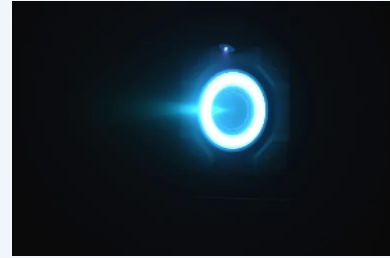
BUSEK CO.

BHT-350

The BHT-350 is a Hall Effect thruster designed for high-volume production and scalability in new space applications, offering an economical propulsion solution for constellations a

Nominal discharge power	350 W
Throttle range	200 W-600W
Nominal thrust	17 mN
Propellants	Xenon, Krypton, Iodine
Nominal specific impulse	1244s
Demonstrated impulse	212 kN·s
Total impulse	>250 kN·s

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BUSEK CO.

BHT-600

The BHT-600 is a high-performance, long-life Hall Effect thruster designed for small satellites, offering primary propulsion and attitude control with options for direct mount or 1

Nominal discharge power	600 W
Discharge power range	300-800 W
Thrust	39 mN (Xe)
Propellants	Xenon, Krypton, Iodine
Specific impulse	Up to 1500 seconds
Demonstrated impulse	1.0 MN·s
Predicted total impulse	>1.5 MN·s

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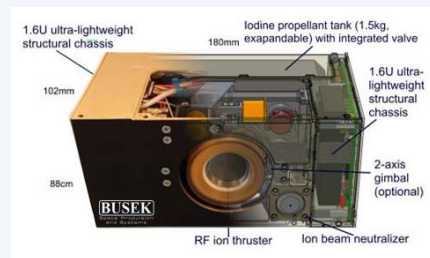
BUSEK CO.

BHT-6000

The BHT-6000 is a high-performance Hall effect thruster optimized for mid-to-high power applications, capable of operating in both high thrust and high impulse modes.

Nominal discharge power (High Thrust Mode)	5,000 W
Supply voltage (High Thrust Mode)	300 V
Thrust (High Thrust Mode)	320 mN
Specific impulse (High Thrust Mode)	2,029 s
Nominal discharge power (High Impulse Mode)	6,000 W
Supply voltage (High Impulse Mode)	600 V
Thrust (High Impulse Mode)	288 mN

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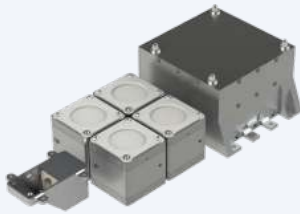
BUSEK CO.

BIT-3 RF Ion Thruster

Compact iodine-fueled gridded RF ion thruster; flown on NASA SLS deep-space CubeSat missions.

System power	56-75 W
Thrust	Up to 1.1 mN
Specific impulse	Up to 2150 s
System dry mass	1.40 kg (with gimbal)
Delta-v	Up to 2.39 km/s (14 kg CubeSat)
Propellant	Iodine (also compatible with xenon)
Neutralizer	BRFC-1 micro RF cathode

[price on request](#)



BUSEK CO.

Electrospray Thrusters

Enabling unique missions in space-based science, from detecting gravity waves to stabilizing large observatories, these thrusters offer precise thrust control and efficient operation.

System Power	12 W - 14 W (24 W max)
Propellant	Ionic Liquid
Thrust	<1 μ N-150 μ N range per thruster
Thrust Noise	<0.2 μ N/rHz
Specific Impulse	850 seconds - 2300 seconds

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BUSEK CO.

FalconSat-3

The FalconSat-3 features the first 3-electrode micro-pulsed plasma thruster (μ PPT) in space, launched in 2007.

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BUSEK CO.

Hall Thrusters

Busek develops leading edge electric propulsion thrusters to enable entirely new classes of spacecraft missions, balancing extraordinarily high specific impulse with excellent thrust.

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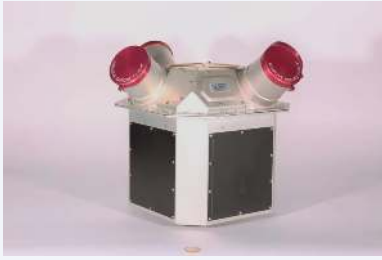


BUSEK CO.

Hall Thrusters

Busek develops leading edge electric propulsion thrusters to enable entirely new classes of spacecraft missions, balancing extraordinarily high specific impulse with excellent thrust.

[price on request](#) [datasheet](#)



BUSEK CO.

LISA Pathfinder First Flight Electrostatic Thruster

Busek delivered eight electrostatic thruster clusters for the NASA/ESA LISA Pathfinder mission, ST7, a technology demonstration mission to prepare for the Laser Interferometry Space

[price on request](#) [datasheet](#)



BUSEK CO.

RF Ion Thrusters

Extremely compact and versatile systems for spacecraft classes from small satellites to nanosatellites, featuring high performance and unprecedented efficiency at its size.

System Power	56-80 W
Thrust	Up to 1.25 mN
Specific Impulse	Up to 2300s
Delta-V	Up to 2.5 km/s (14 kg CubeSat)

[price on request](#) [datasheet](#)

Xe I



BUSEK CO.

SUB-KILOWATT HALL THRUSTERS

Sized perfectly for small satellites and CubeSats, these scalable solutions offer high performance for various applications.

[price on request](#) [datasheet](#)



BUSEK CO.

TacSat-2

The TacSat-2 satellite, launched in 2006, featured Busek's 200W Hall Thruster, marking the first US-designed and US-built Hall thruster in space for primary propulsion.

[price on request](#) [datasheet](#)

Contact Busek Co.

Open the company profile on NewSpace Market to see full specifications and datasheets, and to send a request for quotation that reaches the manufacturer directly.

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<https://www.busek.com>