

Company

BLUE ORBIT SPACE
SYSTEMS UG

[haftungsbeschränkt]

www.blueorbit.space

contact@blueorbit.space

Headquarters

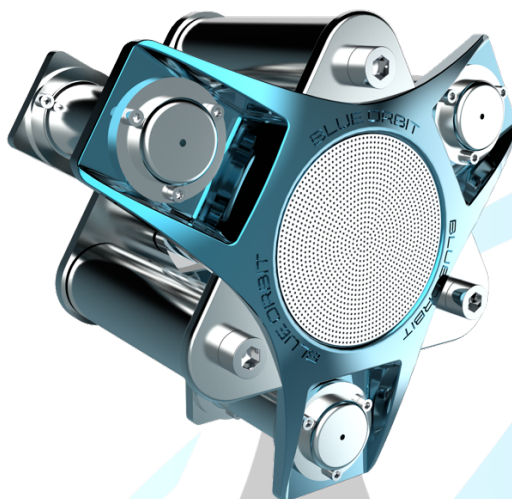
ESA BIC Northern
Germany

Fahrenheitstraße 1
D-28359 Bremen

TRINITY SERIES

Gridded Ion Thruster

TRINIT-ION



Propellant	Argon, Nitrogen
Mass (inc. Thruster and Cathode)	2.5 kg
Dimensions	90 x 85 x 115 mm
Nominal Input Power	800 - 1200 W
Operational Power Range	1500 W
Thrust	< 50 mN
Specific Impulse	< 2500 sec
Efficiency	< 60 %
Life	< 3000 hours
Total Impulse	< 2000 k N-sec
Nominal Flow Rate	2-4 mg/sec
On/Off cycles	5000 cycles
Altitude	From LEO to GEO

The TRINITY-ION provides precision thrust for satellite maneuvering with unique propellants, offering versatility and ensuring cost-effective solutions for a variety of space missions.

Contact:

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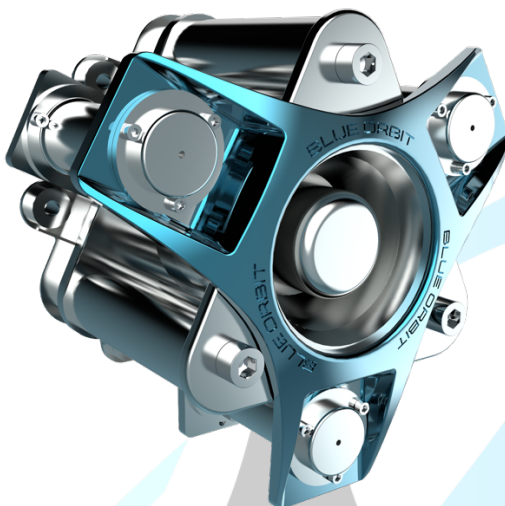
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TRINITY SERIES

Hall Effect Thruster

TRINITY HET



Propellant	Argon, Nitrogen
Mass (inc. Thruster and Cathode)	2.5 kg
Dimensions	90 x 85 x 115 mm
Nominal Input Power	800 - 1200 W
Operational Power Range	1500 W
Thrust	< 100 mN
Specific Impulse	< 1100 sec
Efficiency	< 50 %
Life	< 3000 hours
Total Impulse	< 1500 k N-sec
Nominal Flow Rate	6 mg/sec
On/Off cycles	5000 cycles
Altitude	From LEO to GEO

The TRINITY HET offers reliable thrust for orbital adjustments, providing precision control and versatility across a wide range of satellite missions, making it a cost-effective propulsion solution.

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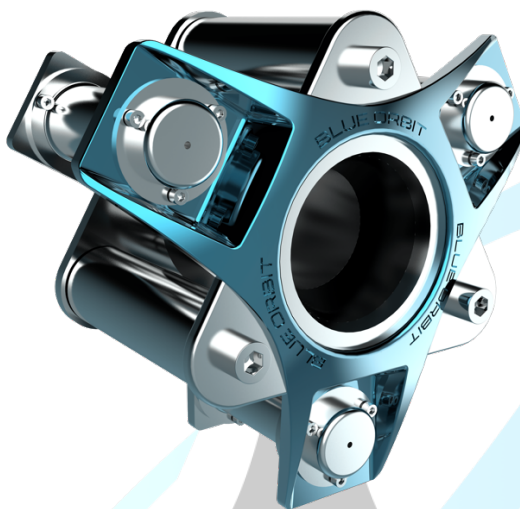
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TRINITY SERIES

Air Breathing Thruster

TRINITY ABE



Propellant	Argon, Nitrogen
Mass (inc. Thruster and Cathode)	2.5 kg
Dimensions	90 x 85 x 115 mm
Nominal Input Power	800 - 1200 W
Operational Power Range	1500 W
Thrust	< 20 mN
Specific Impulse	< 2000 sec
Efficiency	< 60 %
Life	< 3000 hours
Total Impulse	< 1500 k N-sec
Nominal Flow Rate	2-4 mg/sec
On/Off cycles	5000 cycles
Altitude	180-250 km (VLEO)

With its advanced thrust for low-altitude operations, the TRINITY ABE utilizes unique propellants to deliver efficient performance. This versatile system supports diverse missions, making it a cost-effective choice for satellite propulsion.

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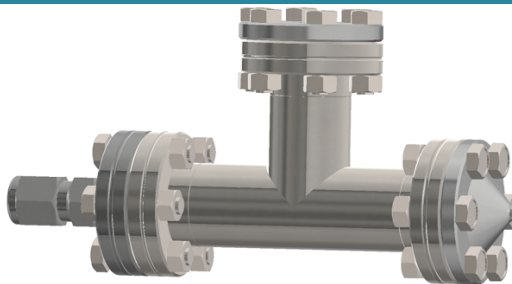
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Resistojets

RESISTOJET



Propellant	Water
Mass	270 g
Dimensions	55 x 33 x 122 mm
Power	10 - 18 W*
Thrust	3.3 - 4.4 mN*
Specific Impulse Range	103 - 108 sec*
ΔV	95 m/sec*
Mass Flow Range	3.2 - 4.4 mg/sec*
Altitude	160-1000 km (LEO)*



Propellant	Water
Mass	250 g
Dimensions	33 x 33 x 100 mm
Power	80 W*
Thrust	27-30 mN*
Specific Impulse Range	103-108 sec*
ΔV	95 m/sec*
Mass Flow Range	26-30 mg/sec*
Altitude	160-1000 km (LEO)*

*Estimate

The resistojets provide sustainable propellant use and precision thrust control for Low Earth Orbit (LEO) operations.

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