



Tailor made chemical propulsion for satellites, OTVs and capsules



Our Solution

Mission-lasting mobility

GATE Space propulsion systems enable fast orbit transfers, collision and threat avoidance maneuvers, attitude control and de-orbiting, while being compatible with established standards for in-space refueling.

Tailored to your needs

GATE Space propulsion systems are tailored to your individual needs such as your spacecraft form factor, your mission profile and your maneuverability requirements.

Produced at scale

GATE Space propulsion systems are scalable and affordable by leveraging qualified off-the-shelf components and established, scalable manufacturing processes.

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Basics

Form factor	Customer specific
Included components	Thrusters—tanks—plumbing—avionics
Lead time	6+ months [customer specific]
Cost	\$300,000+ [customer specific]

Specifications

Total impulse	5,000Ns – 300,000Ns [customer specific]
Specific impulse	270s
Propellants	C ₂ H ₆ and N ₂ O
Pressurization	Self-pressurization blow down

Thrusters

	Thruster S	Thruster M	Thruster L
Min. thrust level	2N	5N	20N
Max. thrust level	20N	50N	200N
Min. impulse bit	0.2Ns	0.5Ns	2Ns
Steady state	Yes	Yes	Yes

Interfaces

Mechanical interface	Customer specific [baseline: aluminium brackets]
Data interface	CAN—RS485—RS422
Electrical connectors	D-sub or Harwin Datamate
Supply voltage	22V to 35V [nominal: 28V]

Environmental compatibility

Operational temperature	–10°C to 30°C [may be increased if required]
Survivability temperature	–40°C to 60°C [may be increased if required]
Launch vehicle	All established launch vehicles [e.g. SpaceX, ArianeGroup, ISRO]

About GATE Space

GATE Space is a subsystem supplier and technology expert in the field of chemical in-space propulsion solutions for spacecraft. GATE Space's patented propulsion solutions are compatible with various propellant combinations and suitable for satellites, capsules and OTVs.