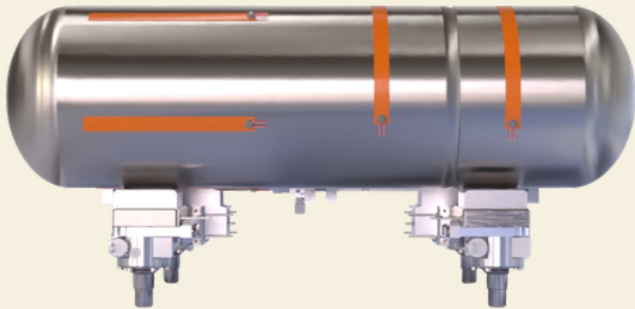


TAILWIND

Off-the-shelf propulsion for 100–250 kg LEO satellites. Non-toxic propellants, guaranteed ignition, 30s warm-up time.



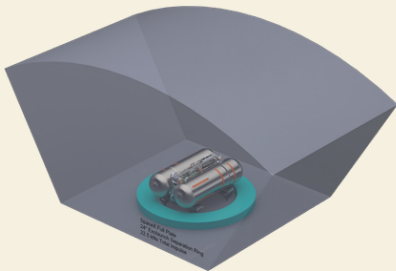
22,500 Ns
TOTAL IMPULSE

11 mN/W
POWER EFFICIENCY

ITAR-free
EXPORT STATUS

SYSTEM

Wet / dry mass	29.0 / 18.4 kg
Form factor	550 x 360 x 180 mm
Compatability	Thrusters fit inside 24" separation ring and adhere to the intrusion allowance on a SpaceX Rideshare Full / XL Plate:



Propellants	Nitrous oxide (N ₂ O) Ethane (C ₂ H ₆)
Temperature ranges	Survival from: –20 to 45 °C Operational from: 5 to 30 °C

POWER & DATA

Power range, during operation	150 / 614 W
Power scaling	Power scales linearly with thrust, at a constant propellant temperature
Power interface	Unregulated 24 to 38 V
Data interface	Dual redundant CAN bus / CSP

THRUST

Thrusters	4x identical 1.4 N thrusters, mounted unidirectionally
Thrust range, bipropellant	1,000 / 5,600 mN
Throttle	Fine throttle control, runs automatically with each burn
Specific impulse, bipropellant	206 – 242 s Depending on operating mode
Impulse precision, bipropellant	± 1.99 %

OPERATIONS

Warm-up time	30 seconds
Propellant filling	Handled by North Propulsion at launch site
Reliability	Our PhaseGuard module guarantees ignition every time, by vaporizing liquid slugs in the feed line.
Momentum management	Each thruster is individually trimmed using our internal IMU, keeping the net thrust vector through the CoM in real time
Export classification	Export controlled under Regulation (EU) 2021/821, 9A004.e.3 ('Attitude and orbit control' systems designed for "spacecraft"), and subject to the U.S. Export Administration Regulations (EAR), ECCN 9A515.x. Not subject to the ITAR