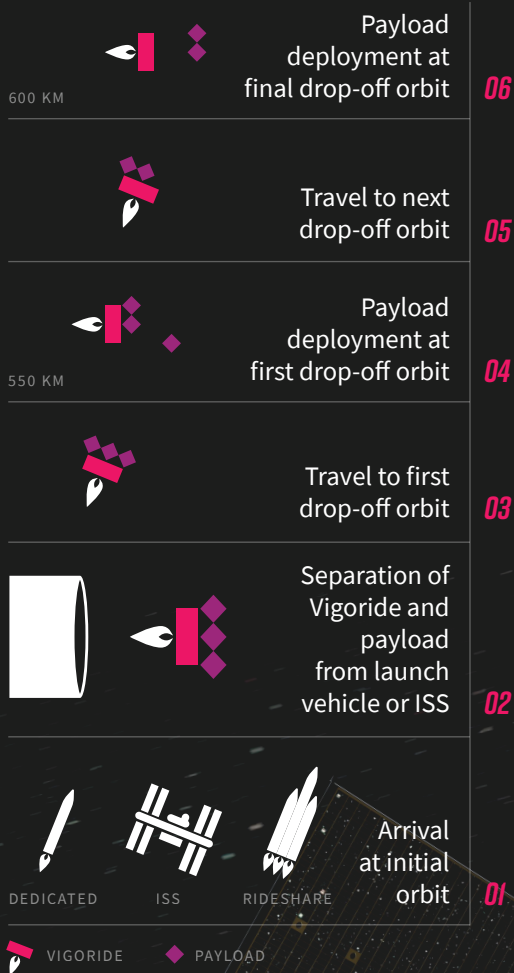


VIGORIDETM

TRANSPORTATION SERVICE

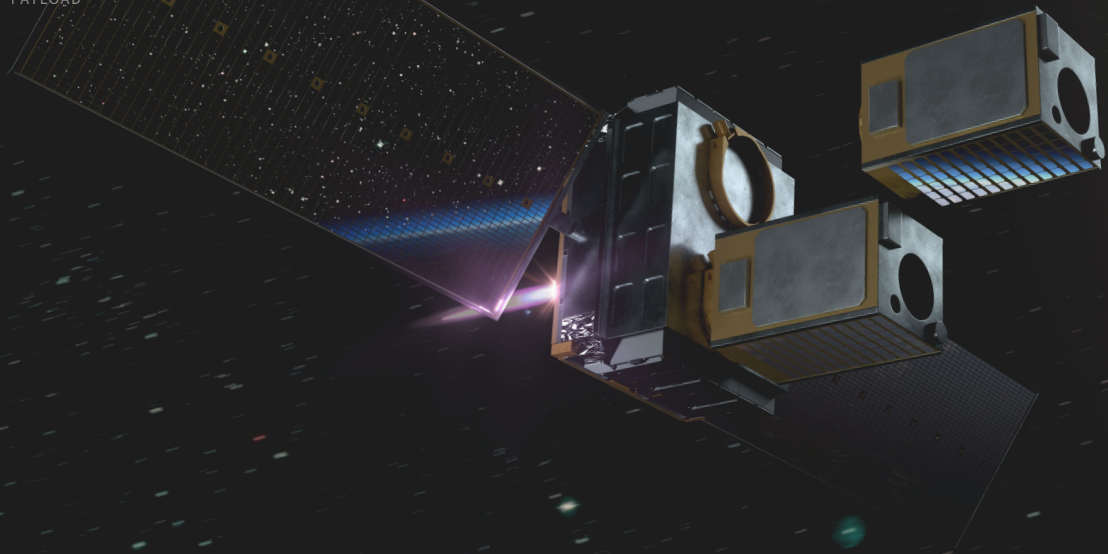


YOUR CONNECTING FLIGHT IN SPACE

Presenting Vigoride: in-space orbit transfer service for satellites. Once in space, Vigoride delivers your payload(s) to one or multiple custom drop-off orbits.

Vigoride enables your satellites to be placed exactly where you need them to be in space. The first leg of the journey is performed by a dedicated small launch vehicle, rideshare via a large rocket, or deployment out of the International Space Station. The Vigoride transfer vehicle will then transport your payload to its final destination.

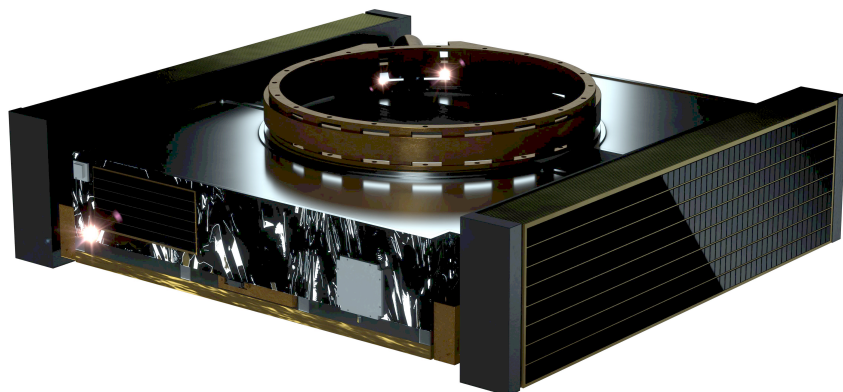
To achieve unprecedented performance, maximum safety, and the lowest cost, Vigoride is powered by Momentus' proprietary water plasma engines. For now, Vigoride is expendable, but future versions will be reusable, capable of serving multiple missions while refueling with water in space.





VIGORIDE™

TRANSPORTATION SERVICE






VIGORIDE SPECS

WET MASS (WITHOUT PAYLOAD): 215 KG
 MAXIMUM PAYLOAD MASS: 500 KG*
 TOTAL IMPULSE: >450,000 N-S
 MAXIMUM ΔV: 1.6 KM/S FOR 150 KG PAYLOAD

WATER-BASED MICROWAVE ELECTROTHERMAL PROPULSION
 3-AXIS STABILIZED WITH ELECTROTHERMAL ATTITUDE CONTROL THRUSTERS
 CUSTOM MACHINED SPACECRAFT WITH INTEGRATED AVIONICS

*UP TO 700 KG ON A MISSION-SPECIFIC BASIS DEPENDING ON LAUNCH CONFIGURATION

TYPICAL MISSION SCENARIOS

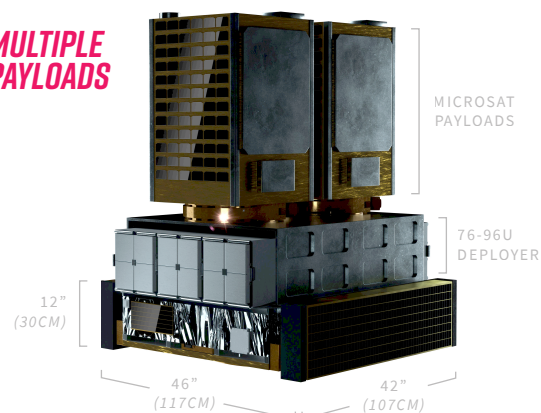
LAUNCH OPTION & INITIAL ORBIT	LEO ORBIT RAISING		LEO CONSTELLATION DEPLOYMENT		SSO ORBIT PLANE ADJUSTMENT	
	MAXIMUM PAYLOAD KG	TRIP TIME MONTHS	MAXIMUM PAYLOAD KG	TRIP TIME MONTHS	MAXIMUM PAYLOAD KG	TRIP TIME MONTHS
 DEDICATED SMALL LAUNCH VEHICLE 300 KM ALT.	500	1 - 2	500	1 - 2	500	2 - 5
 RIDESHARE LAUNCH IN ESPA VOLUME 600 KM ALT.	500	1 - 2	500	< 1	500	2 - 5
 DEPLOYMENT FROM ISS 400 KM ALT.	500	1 - 2	500	1 - 2	N/A	N/A

LEO: LOW EARTH ORBIT | SSO: SUN SYNCHRONOUS ORBIT | LTAN: LOCAL TIME AT ASCENDING NODE

STANDARD RIDESHARE INTERFACE

PAYLOADS CAN BE ATTACHED TO VIGORIDE USING A STANDARD 24" RING, OR ANY OTHER STANDARD ADAPTER. CUSTOM ADAPTER OPTIONS ARE ALSO AVAILABLE.
 STANDARD POWER CONNECTIONS AVAILABLE FOR KEEP-ALIVE OPERATIONS DURING TRANSFER.

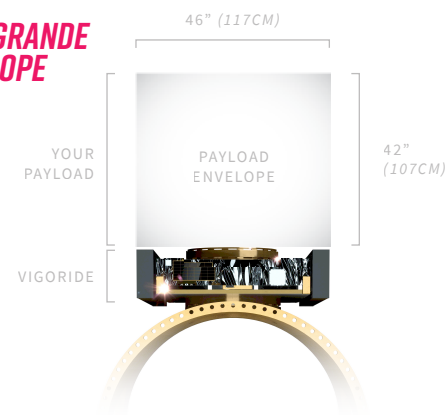
MULTIPLE PAYLOADS



SMALL LV ENVELOPE



ESPA GRANDE ENVELOPE



KEY TECHNICAL ADVANTAGES

- UP TO 3 TIMES FASTER THAN XENON ELECTRIC PROPULSION
- UP TO 2 TIMES THE PAYLOAD AS CHEMICAL PROPULSION
- NON-TOXIC PROPELLANT (100% WATER)
- NO PRESSURE VESSELS

BOOK YOUR RIDE

sales@momentus.space | +1 (650) 564-7820 | momentus.space