

PERFORMANCE INFORMATION

OVERALL SYSTEM DEFINITION

Monopropellant Thruster Options (Thrust and Isp)	100mN, 1N	170s
Bipropellant Thruster Options (Thrust and Isp)	5N, 10N, 22N, and Larger	300s
Total Impulse	Up to 105 kN-s	
Propellant	Chemical Monopropellant and Bipropellant Options	
System Mass (Dry)	10 kg Configuration Dependent	
System Power (Operating)	20-40W Configuration Dependent	
Electrical Interfaces	RS422, Spacewire, Ethernet, CAN	
Operating Voltage	24V – 32V	
Delivery Timeline	Six Months from Order Placement	



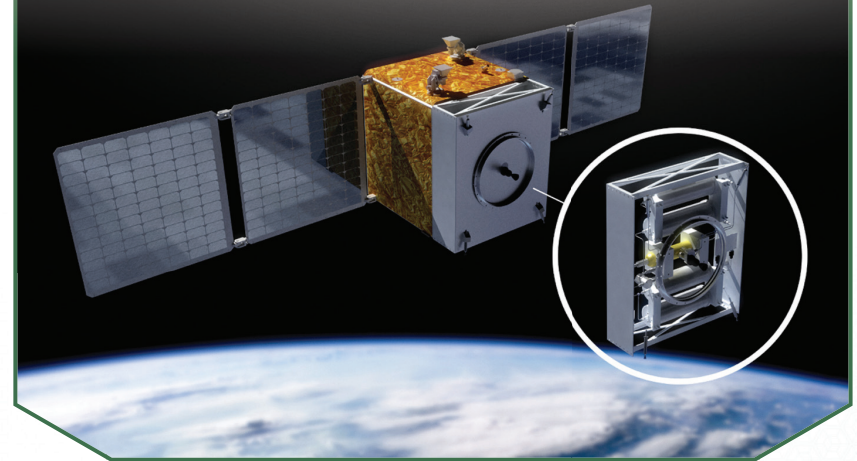
ABOUT US

Tesseract was founded in 2017.
We're a team of world class rocket builders
located in the Bay Area, CA.
All U.S. Citizens.



WWW.TESSERACT.SPACE
CONTACT US: INFO@TESSERACT.SPACE

ADHARA SMALLSAT PROPULSION MODULE



REAL SOLUTIONS

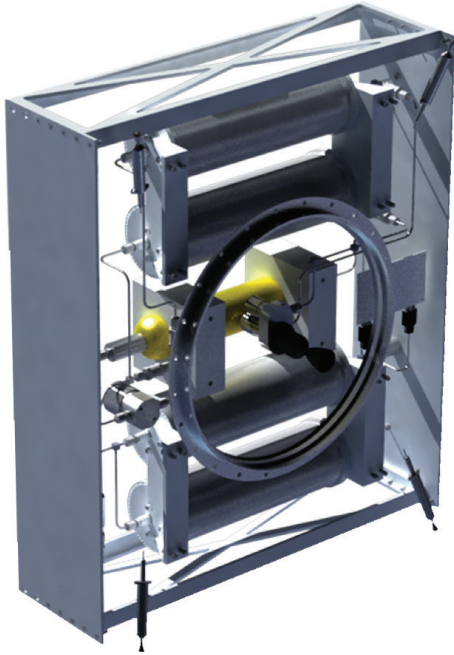
Adhara – Our high-performing, green propulsion module designed for small spacecraft missions that need a fast delivery, high performance, modular, and low cost propulsion option.



TESSERACT

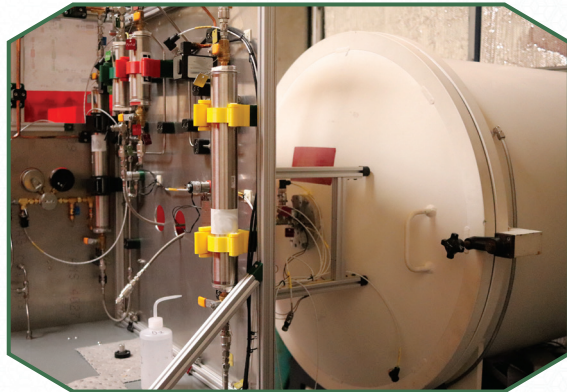
MODERN SPACE PROPULSION

ADHARA — MODULAR SMALL SATELLITE PROPULSION SYSTEM



Adhara is a fully integrated propulsion system which includes thrusters, tanks, propellant, propulsion control electronics and feed equipment. The module system is customizable for each customer, spacecraft, and mission.

The footprint and overall architecture remains modular to allow for individual customization based on mission needs. Adhara is ideal for spacecraft sized CubeSat 12U to ESPA Grande.

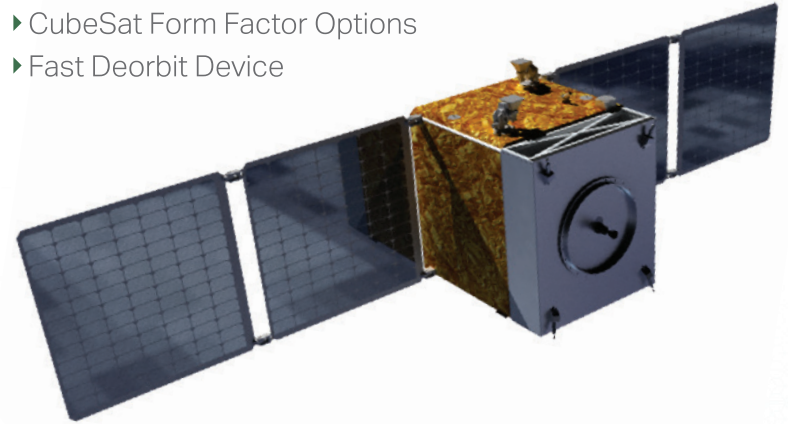


Designed, tested, and verified in vacuum at our manufacturing shop.

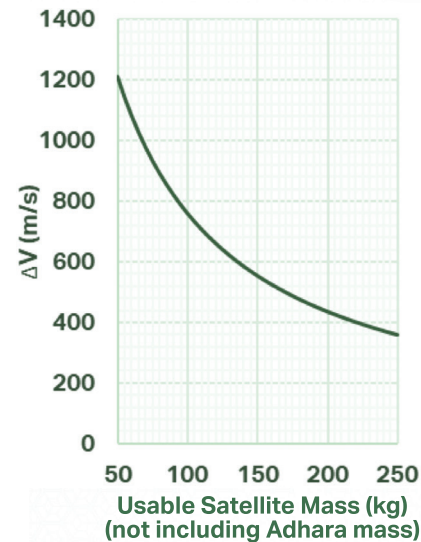
ADHARA SOLUTIONS

OPTIMIZED FOR DIFFERENT INDUSTRY NEEDS

- ▶ SmallSat Full Mission Maneuvering
- ▶ CubeSat Form Factor Options
- ▶ Fast Deorbit Device



EXAMPLE CAPABILITIES DESIGN FOR A SMALLSAT MISSION



SAMPLE SCENARIO: ESPA CLASS SMALLSAT

Spacecraft Assumptions	Mass: 125kg (dry), Total ΔV : 640 m/s
Thruster Configuration	22N Apogee Kick, 4 x 400mN RCS
Prop System Mass	55kg (wet)
Footprint	61 x 71 x 30 cm

This sample mission shows an Adhara for orbit raising and maintenance of an ESPA Class spacecraft. Adhara will also suit all other customer missions and sizes.