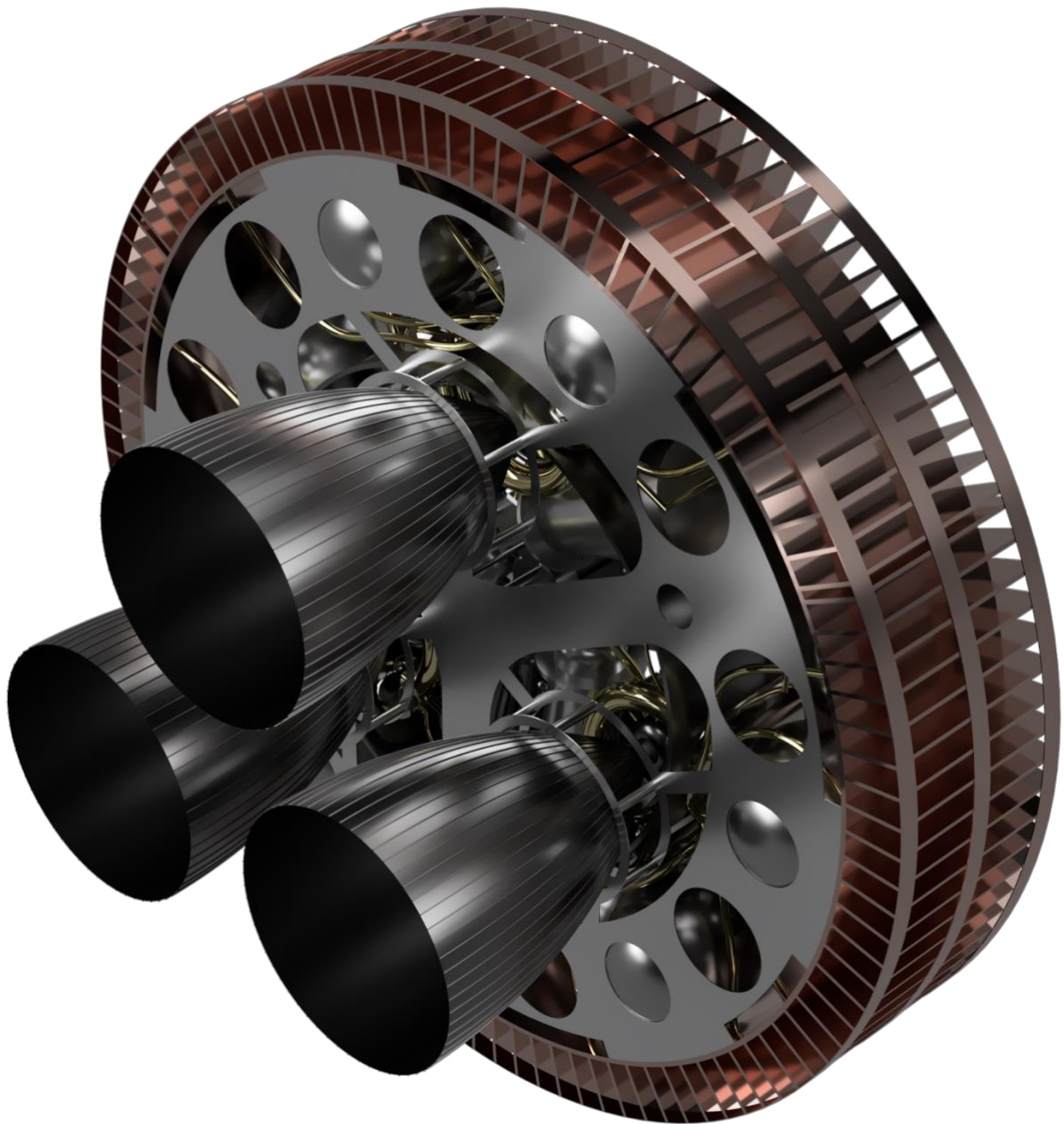




Datasheet

Staged Atomic Thermal Yttrium Recycling 4th Generation (SATYR-4) Rocket Engine





Overview

SATYR-4 is EAI's latest achievement in the field of nuclear power engineering. An integrated power and propulsion unit, SATYR-4 utilizes advancements in gas core nuclear reactors and lightweight turbines to provide mechanical and electrical power throughout a spacecraft's journey. Hydrogen propellant is used in a combined cycle as a working fluid, or is exhausted through a 600:1 expansion ratio. Engine-integrated fuel tanks remove the need for the user to include bulky tanks within their craft. This additionally reduces refueling time by 15% (when compared with performance data collected from SATYR-3) and the number of safety incidents by 55% (when compared with performance data collected from SATYR-3).

This product is supplied with a 15 year warranty, which will be voided in the event of any modification to the engine or use of the engine beyond its designed functionality. Additionally, 4 years of complimentary servicing is provided (only redeemable at an EAI authorized service center).

Physical Specifications

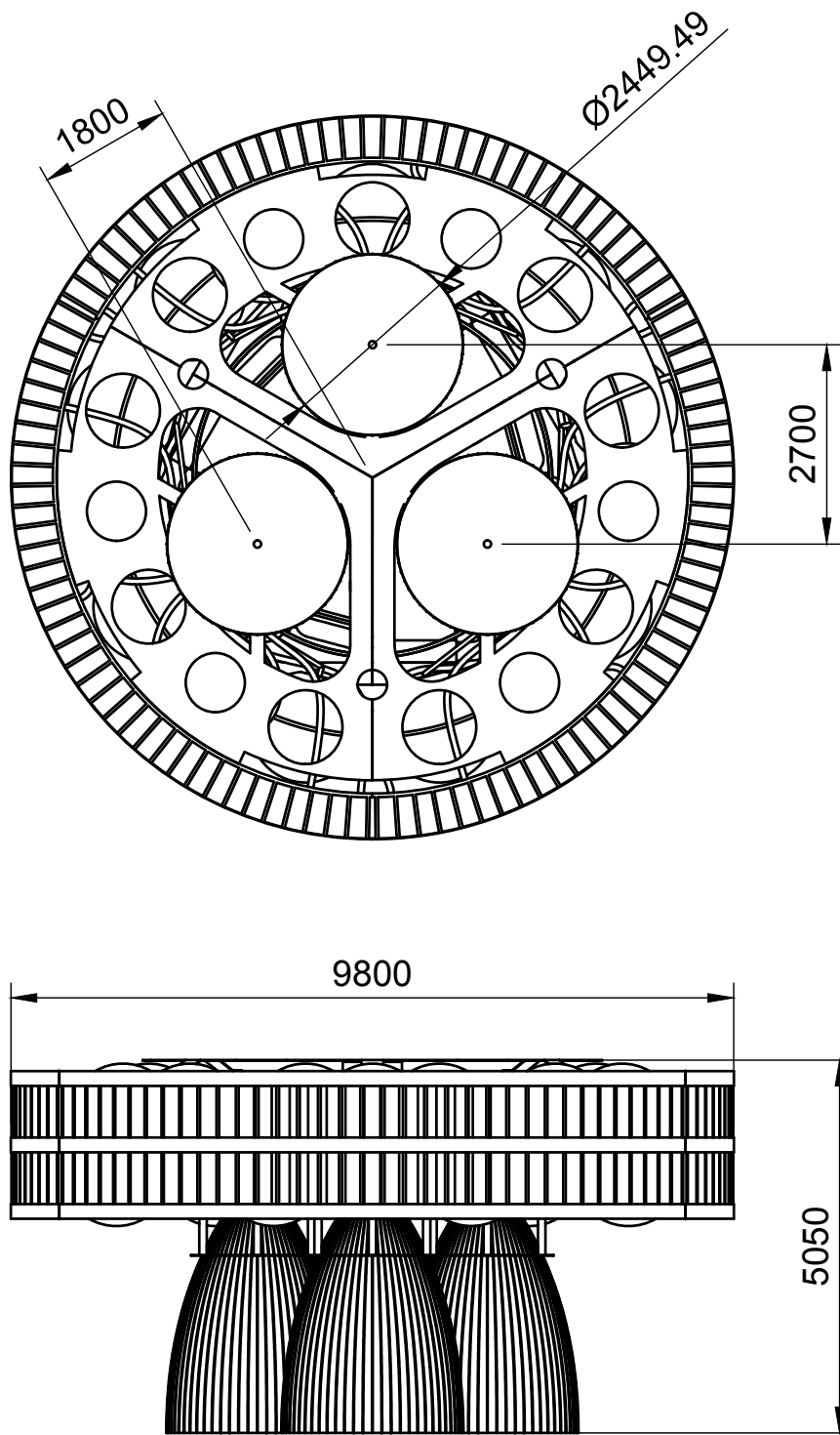
Max. Diameter	Max. Length	Nozzle Length	Mass	
			Dry	Wet (fueled)
9.8m	5.05m	2.8m	8000kg	18500kg

Performance Specifications

Specific Impulse	Max. Thrust	Max. Rated Acceleration	Power Generated	
			In power mode	In thrust mode
5500s	900kN	19.6ms ⁻²	100kW	2kW

Additional Details

Unit Cost	Maintenance Cost per Unit Vehicle Mass
\$103,000,000	\$48.99kg ⁻¹



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