NEWSPACE MARKET

NEWSPACE MARKET · COMPANY PROFILE

Space Machines Company

Australia · founded 2019 · spacemachines.com

5
PRODUCTS

newspacemarket.com/companies/space-machines-company/

as of 20 August 2026

ABOUT

Space Machines Company

Space Machines Company (SMC) is an Australian in-space transportation and servicing company founded in 2019 by Rajat Kulshrestha and George Freney, headquartered in Sydney. The company develops autonomous Orbital Servicing Vehicles (OSVs) that provide what it calls 'roadside assistance in space' — deploying payloads, inspecting satellites, extending spacecraft lifespans, and removing debris across LEO, MEO, GEO, and cislunar orbits. SMC builds both its spacecraft and its own Scintilla propulsion engine in-house — a metal 3D-printed monopropellant thruster delivering 50 N of thrust with over 40 demonstrated restarts and 1,200+ seconds of cumulative test time. The Optimus OTV, Australia's largest privately built satellite at the time of its launch in March 2024 aboard SpaceX Transporter-10, demonstrated the company's end-to-end vertical integration capability. A second-generation vehicle, Optimus 2 (~450 kg), is planned for 2026 via NewSpace India's SSLV for the AUD $8.5M Space MAITRI space domain awareness mission with India. In December 2024 SMC unveiled Optimus Viper — a rapid-response space domain awareness platform designed to deploy within 24 hours and operate within 10 km of target satellites at $2–3M USD per LEO inspection. The company also announced Australia's largest industrial-scale spacecraft manufacturing facility, OF-01 at UTS Tech Lab, targeting initial production in early 2026 with capacity for 20+ vehicles per year. Additional partnerships include Lúnasa (UK, in-space servicing) and Spaceium (cryogenic in-orbit refueling demonstration).

PRODUCTS

Product catalogue

SPACE MACHINES COMPANY

Optimus OTV

Australia's first commercial space tug (270 kg), providing last-mile satellite deployment and in-orbit logistics across LEO, MEO, and GEO.

Mass	270 kg
Dimensions	1.5 m × 1.5 m × 1 m
Customer payload capacity	Up to 500 kg
Supported orbits	LEO, MEO, GEO, GTO-to-GEO
Launch vehicle	SpaceX Falcon 9 Transporter-10
Launch date	March 2024

flight proven · TRL 9 price on request

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Optimus Viper — Space Domain Awareness Platform

Rapid-response space domain awareness OSV deployable within 24 hours, operating within 10 km of target satellites for inspection and intelligence at $2–3M per LEO mission.

Configuration	Diamond cross-section body
Deployment time	Within 24 hours of launch
Operational proximity	Within 10 km of target satellite
Propulsion	Scintilla engine (scalable 50–500 N)
Operating system	Solstice OS (AI-driven orbital OS)
Orbits supported	LEO, multi-orbit capable
Capabilities	SDA inspection, proximity intelligence, dynamic reconfiguration

$2 000 000 – $3 000 000

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Optimus Viper RRV

200 kg rapid-response spacecraft for space domain awareness, proximity inspection, and satellite security operations — deployable within 24 hours of launch.

Mass	~200 kg
Operational range	Within 10 km of target satellites
Deployment speed	Within 24 hours of launch
Operating system	Solstice OS (AI-driven)
Propulsion	Scintilla engine (3D-printed, in-house)
Pricing (LEO inspection)	$2–3M USD per inspection

price on request

SPACE MACHINES COMPANY

OrbitSide Assist

On-orbit rapid-response service providing satellite inspection, refueling, life extension, repair, and debris management using the Optimus Viper fleet.

Services	Inspection, monitoring, refueling, repair, life extension, debris removal
Response time	Within 24 hours of deployment
Operating range	Within 10 km of target satellite
Platform	Optimus Viper fleet + Solstice OS

price on request

SPACE MACHINES COMPANY

Scintilla Propulsion Engine

In-house 3D-printed metal rocket engine delivering 50 N thrust at 92% efficiency, developed entirely by Space Machines Company in Australia.

Thrust	50 N
Efficiency	92% (pathway to 99%+)
Maximum continuous burn	65 seconds
Restart cycles demonstrated	40+
Cumulative test time	1,200+ seconds
Manufacturing method	3D-printed metal (additive manufacturing)
Scalability	100–500 N with minor modifications

price on request

Contact Space Machines Company

Open the company profile on NewSpace Market to see full specifications and datasheets, and to send a request for quotation that reaches the manufacturer directly.

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