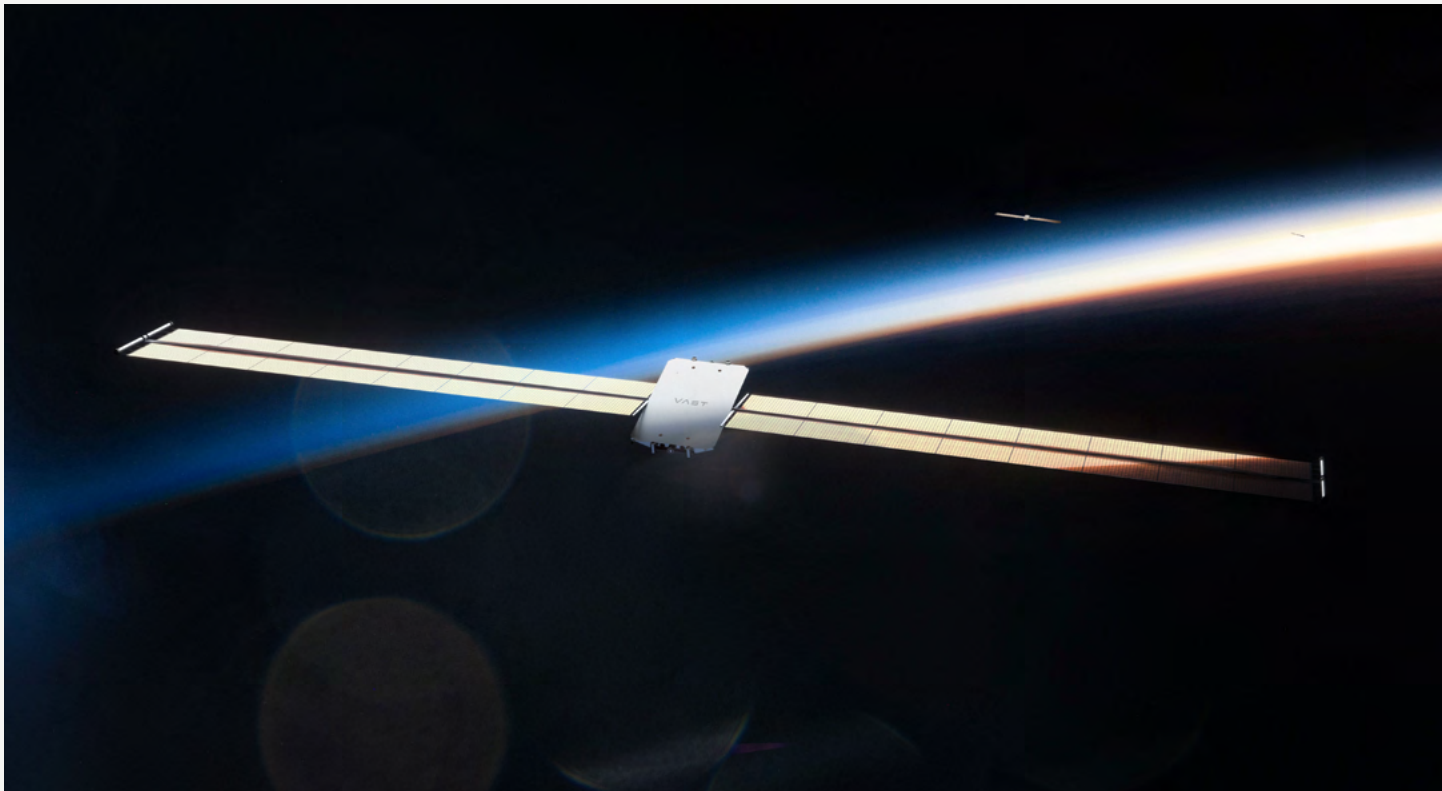


Vast Satellite

High power (15 kW) satellite bus



Vast Satellites leverage in-house space station technology and proven Haven Demo satellite heritage for power-intensive missions across communications, Earth observation, orbital data centers, sensing, and national security.

DIMENSIONS	2.2 x 3.6 m	TOTAL MISSION ΔV	≥500 m/s
BUS DRY MASS	700 kg	DESIGN LIFE	5 years
PAYLOAD MASS	350+ kg	LEO ALTITUDE RANGE	350-1,200 km
POWER	15 kW	FUTURE ORBITS	MEO, GEO, Lunar

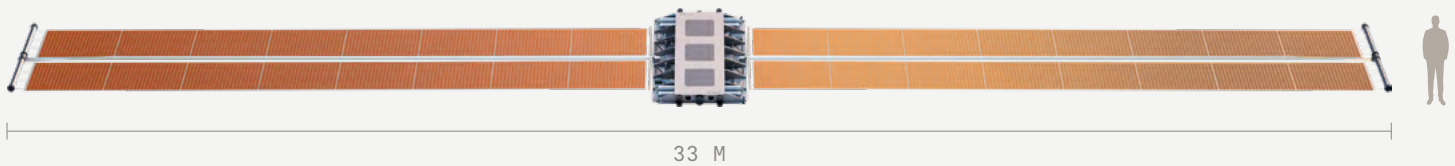
For more information
vastspace.com/satellites

Contact
satellites@vastspace.com

Vast Satellite

High power (15 kW) satellite bus

VAST



Satellite Specifications

Design life	5 years	Flat panel structure optimized for high-density launch and batch deployment. 
Dimensions	2.2 x 3.6 m	
Dry mass	700 kg	
Power	15 kW	
LEO Altitude Range	350-1,200 km	Future orbits MEO, GEO, Lunar
Propulsion	10 kW Krypton Electric propulsion thruster	Total Mission ΔV ≥ 500 m/s
Attitude Control	■ Torque rods ■ Control moment gyroscopes	
Flight computer	Lockstep core flight computers with Gigabit Ethernet switches	
GNC Sensors & Performance	■ IMU ■ Sun sensors ■ Star tracker ■ Magnetometer ■ Dual input GNSS receiver	Pointing knowledge < 0.05 deg @ 1σ Pointing control < 0.1 deg @ 1σ Enhanced pointing option < 0.005 deg knowledge / < 0.02 deg control @ 1σ
Communications & Data	TT&C High-rate downlink** Laser Comm** Custom RF**	S-band radio + antennas X-band radio + antennas Third-party terminal Software-defined radio + custom RF front ends

Payload Specifications

Payload Mass	350+ kg	Flexible payload mounting locations and volume
Power	Peak payload power 20 kW+ (time dependent) Orbit average power 6–14.5 kW* Bus-managed thermal dissipation 6–10 kW*	
Onboard Compute & Imaging	NVIDIA Space-1 Vera Rubin Module** 4K video cameras and recorder system**	
Interfaces	Standard ■ Ethernet (10/100/1000BASE-T) ■ RS-422 serial ■ Discrete I/O ■ 4–20 mA and 0–5 V analog sensor inputs ■ 10 kΩ platinum RTDs ■ Heaters	Enhanced ■ MIL-STD-1553** ■ SpaceWire**