

AstroVinci™ Microreactor

Enabling Resilient and Reliable Power for Future Space Missions

As the space economy continues to grow, energy will be at the forefront of enabling our future missions.

Current technologies are limited by access to solar power and energy storage, which is intermittent and limiting to missions.

Westinghouse is leveraging the eVinci™ microreactor technology to develop the AstroVinci™ microreactor — a resilient and mass efficient power source for Satellite, Spacecraft and planetary surface power applications.

Key Applications:

- Civil, Defense or Commercial Satellite Power Systems
- Lunar Surface Power Systems — Energy and process heat to power habitat bases, in-situ resource utilization, construction and surface operations
- Martian Surface Power Systems — Extensible to support NASA's Moon to Mars initiative with similar Lunar applications
- Nuclear Electric Propulsion (NEP) — Powering spacecraft propulsion systems for extended space missions/travel

AstroVinci™ Microreactor Technical Capabilities:

- Can support various mission types with power outputs ranging from 10kWe to 2Mwe
- 10 years of continuous safe power
- Mass efficient and compact for space transport and deployment
- Resilient and fault tolerant design for extreme operating environments
- Heat pipe technology allows for no moving parts to passively transfer heat into a power conversion engine including Brayton or Stirling

Backed by 130+ years of Westinghouse nuclear power design and operating innovation.

Westinghouse is your energy partner of choice, helping humanity enable space exploration, science and technology innovation.

