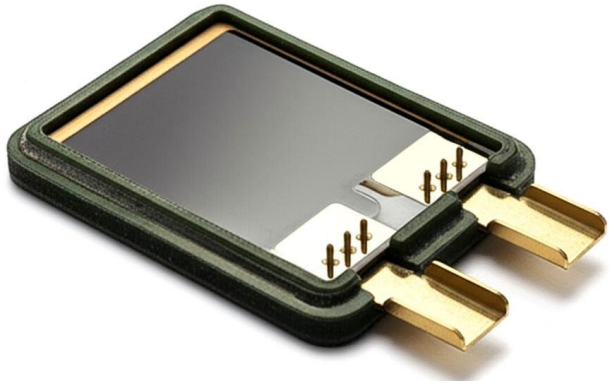
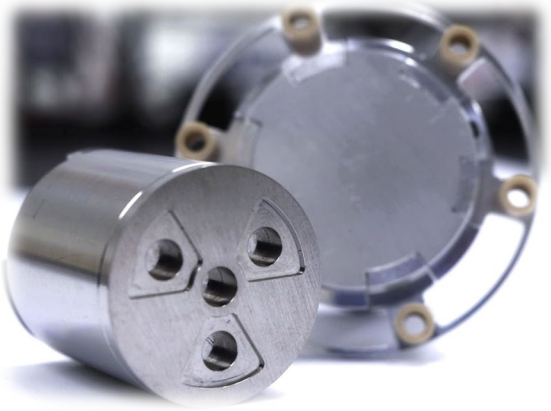
About entX Limited

entX advances innovation through Nuclear Science and Engineering, creating scalable technologies for energy, defence, healthcare, and decarbonisation. From revolutionary power systems like GenX and RHU to carbon capture with producing pre-cursors for life saving medical treatments, we deliver sustainable solutions that transform industries and drive lasting impact.





entX Space and Defence

Energy for the future

Innovations that generate electricity and heat without external fuel or carbon emissions. Revolutionising the Space and Defence sectors, enabling longer-lasting, more powerful, and sustainable operations in challenging environments.

Capabilities

GenX Betavoltaic Power Generator (TRL 5)

- Maintenance-Free Power for Terrestrial, Space and Lunar Missions.
- Generating a continuous power supply for decades. Harnessing energy from beta radiation.
- Perfect for covert applications. No noise or heat emissions.
- Enhancing the capabilities of remote sensors, unmanned underwater platforms, communication devices and equipment.
- Providing reliable power for satellites, rovers, and space missions.

Radioisotope Heating Unit (TRL 5)

- Providing electronic survival during lunar nights for extended mission life.
- Our solutions can power remote and autonomous systems in harsh terrestrial environments, including defence applications.
- Simple design with a selection of isotopes for targeted mission durations and type.

Discriminators

- The highest performing betavoltaic device globally that is suited to mass production.
- First commercial RHU to be launched in the USA in 2027
- A broad Intellectual Property (IP) portfolio with patents granted in a growing number of global jurisdictions.

Key Customers

- Rapid Prototype Contract completed 2024 - Commonwealth of Australia Defence client

Key Partners

- Australian Nuclear Science and Technology Organisation (ANSTO)
- Future Industries Institute – University of South Australia
- University of Adelaide
- Australian Government

Validation from Top Industry and Government Priorities

- DARPA's focus on radiovoltaic devices—aiming for power outputs over 10 W/kg by 2030
- NASA ranks surviving the lunar night as the number one capability shortfall in the civil space sector, supporting the development for technologies like RHU.
- NASA ranks high-power lunar energy generation as its second most critical technology gap, further underscoring the market potential for GenX.

Accreditations

- Defence Industry Security Program – Level 2
- AUKUS Authorized User
- Negative 1 Vetting (8 personnel)
- Australian Defence Export Controls reviewed – technology not controlled

Contact

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