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Theia Labs

THEIA LABS IS DEVELOPING LASER-BASED WIRELESS POWER TRANSMISSION (WPT) TECHNOLOGY TO EXTEND THE OPERATIONAL LIFETIME OF CUBESATS IN LOW EARTH ORBIT, PAVING THE WAY FOR MORE CAPABLE AND SUSTAINABLE SMALL SATELLITE MISSIONS.

Theia Labs is developing laser-based wireless power transmission (WPT) to extend CubeSat operational lifetimes in low Earth orbit. Our technology provides supplementary power, reducing reliance on large batteries. This frees space for payloads and enables power-intensive operations. In the future, our system could support satellite constellations and space debris removal. Beyond space, we see applications in precision agriculture. WPT can be used for precision weed control, eliminating unwanted plants and thereby reducing the use of herbicides. Our dual-market approach allows us to refine our core technology while generating early revenue.



USP

Our WPT technology boosts CubeSat operations by reducing battery degradation, extending satellite lifetimes, and enabling dynamic power distribution within satellite constellations.



The High Tech Incubator



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Space connection

Power limitations are a critical challenge in satellite operations, and our technology addresses this by using space-grade wireless power transfer (WPT) to improve CubeSat performance and enable long-term space missions.

Team

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