



EMPULSER

CONTACTLESS POWER TRANSFER

Creating scalable, world changing contactless power solutions to unlock productivity across autonomous systems, consumer electronics, IoT, and energy grids.

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Breaking the Power Delivery Bottleneck

Legacy wires and batteries constrain robots, drones, and consumer electronics preventing continuous, flexible energy flow



Infrastructure limits: power delivery depends on wires and batteries

Wired systems and battery reliance reduce efficiency, flexibility, and innovation.



Operational impact: downtime and limited endurance

Robots incur costly charging downtime; drones face short flight times from battery constraints.



Opportunity: enable continuous, adaptable energy flow

Contactless power transfer unlocks flexibility for robotics, drones, and consumer electronics.



Contactless Power Transfer, Reinventing Energy Delivery

Empulser commercializes RF, magnetic and photon based power to enable continuous, untethered device operation



1 Principle: contactless energy transmission

Energy flows via radio frequencies, magnetic fields, or photons without connectors.



2 Commercialization: civilian deployment

Empulser brings previously military limited tech to civilian markets for broad use.



3 Benefits: flexibility, safety, scalability

Enables continuous untethered power, removes delivery barriers, and scales across sectors.



4 Impact: unlocks new integration frontiers

Transforms energy delivery and opens opportunities for novel technology integration.



Drone Solutions: Unlocking Extended Flight Power

Contactless mid-mission charging and laser power to extend endurance and enable high-power payloads

- 1 Flight time limits: typical drones constrained to 10–20 minutes by batteries
- 2 Contactless recharge: Empulser magnetic resonance powered loops and autonomous stations for mid-mission recharge
- 3 Long-range option: laser-powered drones receiving energy over hundreds of meters to kilometers
- 4 Operational impact: dramatically extended endurance; supports power hungry radar and advanced optical payloads
- 5 Deployment: planned for 2026

Continuous Wireless Power for Robots

Keep industrial and service robots operating without downtime via contactless magnetic-resonance floors and charging zones

Problem: robots limited to a few hours of operation → frequent workflow interruptions



Solution: Empulser contactless power via magnetic resonance floors and charging zones



Benefits: continuous charging extends productivity, enables stronger processors & sensors, supports heavier payloads



Impact: transforms workflows in factories, hospitals, and homes; deployments anticipated in 2026




Value: an invisible power grid that reduces downtime and unlocks advanced robot capabilities



Cordless Consumer Power: Everyday, Seamless Charging

Contactless power in surfaces plus room scale light transmission; deployment targeted for 2026

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- 1 Seamless convenience: devices charge while in use on everyday surfaces (countertops, car consoles)
 - 2 Eliminates dead batteries: no cords, no pads; integrated wireless power environment
 - 3 Surface-embedded contactless power: short range energy transfer built into furniture and vehicle interiors
 - 4 Room-scale light based systems: developing safe, high power optical transmission for longer range
 - 5 Market timing: deployment targeted for 2026
 - 6 Integrated experience that fits modern lifestyles and removes cord friction

Contactless Power Grids: Laser delivered Energy for Remote Communities

Empulser beams power over long distances to bypass cables, cut blackout risk, and enable rapid expansion: aiming for field testing in 2026



Problem: traditional grids costly or impractical in remote, rugged regions



Solution: Empulser contactless grid uses laser transmission to beam energy over long distances



Benefit: eliminates dependence on cables and reduces blackout risk from damaged lines



Impact: enables rapid grid expansion and reliable power for isolated communities



Outcome: supports economic development and social inclusion; target in field testing in 2026

Executive Leadership & Expert Team Driving Innovation

Visionary founders and domain leads accelerating contactless power deployment



Patrick Tsang (CEO)
Founder and strategic
lead driving product
vision and partnerships



Tim Ramon (COO) Co-
founder, operations,
deployment, and go to
market execution



Roman Park (Product
Lead) driving product
vision.



Dr. Julien Levallois and
team, Domain leads in
Design, Energy
Transfer, supporting
rapid innovation

Unique Positioning: From Bold Ideas to Real World Impact

Empulser engineers fully integrated contactless power solutions that accelerate deployment and deliver immediate value



Deployment first engineering

Focus on technology deployment over pure research; custom, integrated solutions for immediate impact.



Industry challenges, tailored solutions

Identify critical challenges and engineer pragmatic fixes that bridge innovation to implementation.



Accelerated adoption & value

Minimize gap between innovation and implementation to speed adoption and deliver tangible value.



Scalable contactless power portfolio

Targets autonomous systems, consumer devices, IoT, and energy infrastructure with scalable solutions.

Seizing a Once-in-a-Lifetime Opportunity

Empulser to lead contactless power transfer with safe, scalable deployments starting 2026



1

Market opportunity and positioning

Contactless power transfer is a paradigm shift; Empulser positioned to lead global transformation.

2

Product impact and applications

Safe, scalable solutions for autonomous drones, remote power grids, and diverse industries.

3

Go-to-market and timeline

Product deployments planned as early as 2026; invitation for stakeholder partnerships.

4

Strategic value for stakeholders

Unlock industrial innovation, operational freedom, and unparalleled growth potential.



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