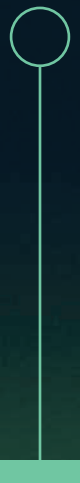
ENRX

PWRMOVE®

CONTACTLESS POWER SUPPLY FOR RAIL-MOUNTED TRANSPORTATION SYSTEMS



The smart way to supply power

The shift to smart factories, warehouses and logistics centres is accelerating. However, traditional power supply methods for rail-guided systems remain a bottleneck. Cables wear out, connectors fail and energy transfer interruptions impact uptime. Continuous power delivery is critical to keeping operations running smoothly.

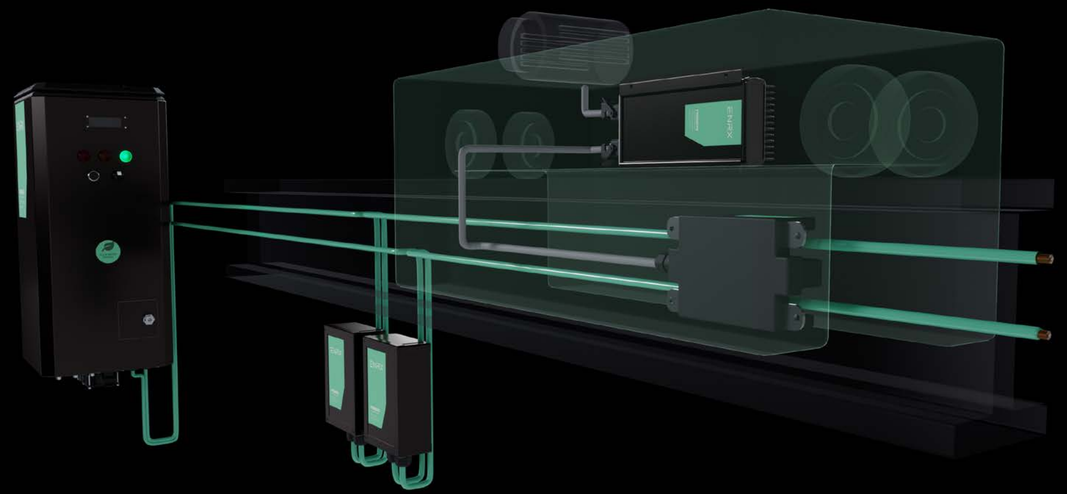
PWRMOVE delivers a contactless power supply, ensuring uninterrupted energy transfer for rail-guided transport at any speed. With no physical connectors and no moving parts to replace, it offers a highly reliable, low-maintenance alternative. Without sliding contacts, it operates silently, making it ideal for high-speed automation. It's a flexible and future-proof system allowing 24/7/365 operations.

Make the most of smart power supply. PWRMOVE boosts uptime and competitiveness, paving the way for productive operations. Let's power the future and move beyond outdated constraints—maximising uptime with energy-efficient, high-speed contactless power transfer.

Kilometres of industrial tracks **300+**

Since **1996**

Patents **1200+**



Experts in inductive power transfer

ENRX has been advancing inductive power transfer since 1996, delivering wireless charging and contactless power supply systems. With a global presence and proven expertise, we support businesses in achieving reliable and efficient energy transfer. Whether you're exploring new possibilities or looking to optimise existing operations, we're here to help.

WHERE TO USE

Applications:

Automated storage, retrieval and transport systems (ASRS)
Sorter systems and cross-belt sorters
Assembly lines and automated production systems
Electrified monorail systems (EMS), skillet and floor conveyor systems
Pallet transfer shuttles and stacker cranes
Lifts, satellites and vertical transport systems
Amusement rides, including underwater attractions

Industry:

Warehousing and logistics
Manufacturing and assembly
Automotive production
Airports, ports and harbours
Parcel and postal distribution
Amusement parks
Pharmaceutical and cleanroom environments
Food and beverage processing
Intralogistics and material handling

Power without contact, motion without limits

PWRMOVE supplies 20 or 40 kW of uninterrupted power to rail-mounted transport systems, eliminating wear and maintenance issues associated with traditional power rails and connectors. Designed for high-speed, high-efficiency energy transfer, it ensures smooth operation—even in demanding environments.

Continuous high-speed power delivery

PWRMOVE provides a seamless, contactless energy supply. No friction, no mechanical wear—just reliable power where it's needed. Energy is supplied continuously along the track, allowing vehicles to draw power in real-time at high speeds without power fluctuations. Even if a carrier needs replacement, the system remains operational, enhancing overall uptime.

Safe and clean in any environment

PWRMOVE keeps sparks, copper dust and exposed contacts out of the equation, ensuring safe, silent and uninterrupted power even in demanding environments. Built for wet, cold and contamination-sensitive areas—with optimised Electromagnetic Compatibility (EMC) for seamless integration into high-tech systems—it operates reliably everywhere.

Easy to integrate and scale up

The modular design of PWRMOVE fits both new and existing systems. Its compact fifth-generation 85 kHz technology delivers higher power density while reducing system size by up to 60%. Whether for a single track or a large-scale automation setup, it offers a future-proof solution that minimises energy loss and space requirements.

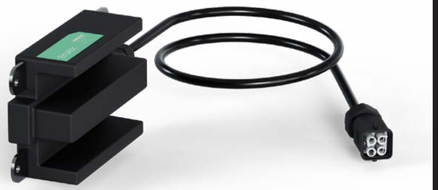


What does PWRMOVE stand for?

PWRMOVE merges "Power" and "Move" to symbolize its ability to deliver continuous, contactless energy to rail-guided systems.

This is PWRMOVE

PWRMOVE is a contactless power supply system that keeps rail-guided transport running without interruptions. With 97% power transfer efficiency, it ensures stable power with minimal energy loss. By eliminating mechanical connectors, it reduces maintenance and maximises uptime. Its compact design allows easy integration.



STATIONARY COMPONENTS



Inductive Power Supply (IPS):
The power source
Transforms standard grid power into high-frequency alternating current (AC), ensuring a stable and continuous energy supply along the entire track.



Litz cables (LZC): The power carrier
Embedded along the track to carry high-frequency AC power. The cables generate a consistent electromagnetic field, enabling efficient energy transfer to moving shuttles while minimising energy loss.



Compensation box (CMO):
Power optimisation
Optimises energy efficiency by balancing voltage and current levels, ensuring high system performance over long distances.

MOBILE COMPONENTS



E-shaped pickups (EPU):
The energy receiver
Mounted on carriers surrounding the power rail, effectively capturing energy from the electromagnetic field. It is designed for high-speed, silent operation, ensuring reliable energy transfer during sharp turns and at varying distances from the track.



Inductive power regulator (IPR):
Optimising power delivery
Transforms high-frequency AC power from the pickup into stable DC power, which supplies the vehicle's motor and onboard systems. This regulation ensures consistent voltage levels and prevents power fluctuations.

A family for inductive power transfer

ENRX offers wireless charging and contactless power supply systems for smart factories, warehouses and logistics centres. Our technologies eliminate the need for cables, connectors and manual handling—delivering seamless, high-efficiency energy transfer across multiple applications.

More about our products, applications and the industries we serve

ENRMOVE®	Static wireless charging for AGVs, AMRs and forklifts, ensuring reliable energy transfer for 24/7/365 operations in industrial environments as well as warehousing and logistics.
PRIMOVE®	Heavy-duty wireless charging for ports, harbours and public transport, powering electric trucks, buses and off-road vehicles with up to 300 kW high-power inductive technology.
PWRMOVE®	Contactless power transfer for rail-guided systems, delivering direct energy to electric motors in sorter systems, conveyor lines, EMS solutions, lifts and amusement parks—including underwater applications.

Get in touch

info@enrx.com

About ENRX

ENRX is a global green tech company driven by induction. We offer induction heating, wireless charging and contactless power supply with low or no carbon footprint for a variety of applications in mobility and manufacturing.

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