

SELF-e



Standalone, wireless, battery-free switch

What is SELF-e?

SELF-e helps switches generate their own energy using energy harvesting, which recovers mechanical energy, that is placed inside. Switches can then wirelessly control electrical equipment in a building, such as lighting and blinds.

This technology reduces the environmental impact and eliminates any kind of maintenance (such as changing batteries), including in real estate management.

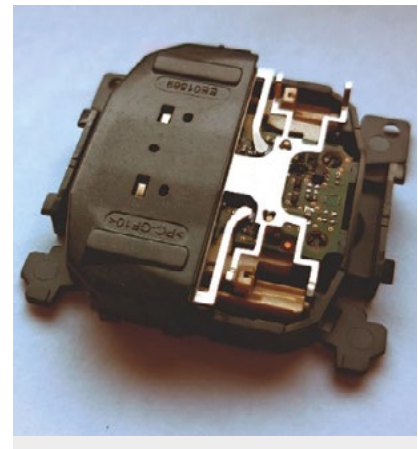
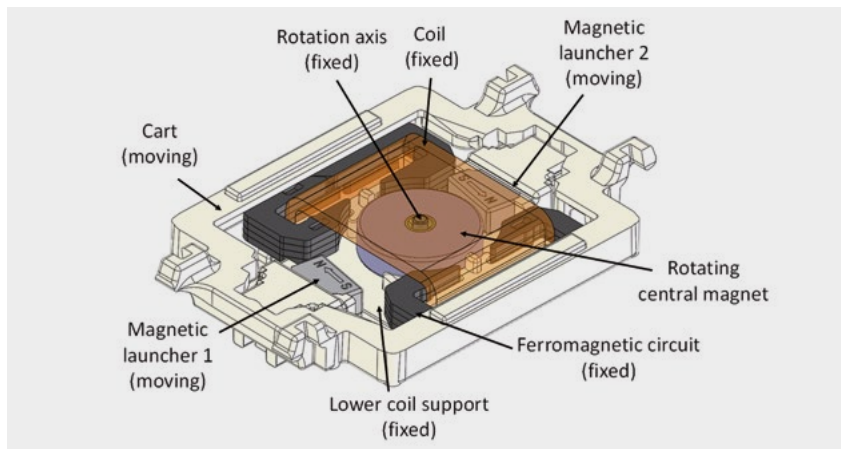


What's new?

This perfectly compact disruptive technology is possible thanks to a new energy recovery concept providing an energy density that is twice as high as competing devices, and which improves the sturdiness, range, and safety of communications between the switch and electrical equipment being controlled.

SELF-e includes the following performance:

- 1.2 mJ reach / 750 μ J on the industrial version
- Highest energy density ($\times 3$ compared to competitors)
- Energy density is twice as high as that found in competing devices



Tech inside

Based on magnetic attraction-repulsion phenomena between a central magnet and magnetic launchers, the energy recovery element operates wirelessly, reducing associated mechanical impacts and sound effects. The energy recovery element is associated with an advanced operating mechanism that triggers the system regardless of its initial position and of the key that is touched. Finally, the unit integrates easily and discretely into different device ranges in the Legrand brand, without modifying their design or installation requirements.

Interested in this technology?

Contact:
Swan Gerome
swan.gerome@cea.fr
 +33 438 784 624

CEA-Leti, technology research institute

Commissariat à l'énergie atomique et aux énergies alternatives
 Minatec Campus | 17 avenue des Martyrs | 38054 Grenoble Cedex 9 | France
www.cea-leti.com



@CEA_Leti



CEALeti



CEA-Leti

