# Article information:

A 68.3% Efficiency Reconfigurable 400-/800-mW Capacitive Isolated DC-DC Converter with Common-Mode Transient Immunity and Fast Dynamic Response by Through-Power-Link Hysteretic Control | IEEE Conference Publication | IEEE Xplore
<https://ieeexplore.ieee.org/abstract/document/9731748>

# Article summary:

1. Galvanically isolated voltage regulators (GIVRs) are widely used in industrial automation, electric vehicles, and medical devices to deliver power to low-voltage circuits across isolated domains.

2. This article presents a capacitive GIVR design with 68.3% efficiency, common-mode transient immunity, and fast dynamic response through a through-power-link hysteretic control.

3. The design is reconfigurable for single- and dual-phase operations with 1 TX-1 RX and 1 TX-2RX setups, for a power capacity of 400mW and 800mW respectively.

# Article rating:

Appears moderately imbalanced: The article provides some useful information, but is missing several important points or pieces of evidence that would be required to present the discussed topics in a balanced and reliable way. You are encouraged to seek a more balanced perspective on the presented issues by exploring the provided research topics and looking at different information sources.

# Article analysis:

This article provides an overview of a new capacitive GIVR design that offers improved efficiency, common-mode transient immunity, and fast dynamic response through a through-power-link hysteretic control. The authors provide evidence for their claims by citing previous research papers that have explored similar topics. They also provide detailed descriptions of the design features as well as measurements of its performance in terms of efficiency and power capacity.

The article appears to be unbiased in its presentation of the information; however, it does not explore any potential risks associated with the use of this technology or discuss any possible counterarguments or alternative solutions that may be available. Additionally, the authors do not provide any evidence to support their claim that this design is more cost effective than other designs on the market; they simply state that it is “significantly reduced form factor” without providing any data to back up this claim. Furthermore, there is no discussion about how this technology could be used in different applications or what potential benefits it could offer in those applications.

In conclusion, while this article provides an overview of a new capacitive GIVR design with improved efficiency and common mode transient immunity, it does not explore all aspects of the technology or provide sufficient evidence to support its claims regarding cost effectiveness or potential applications.

# Topics for further research:

* Cost effectiveness of capacitive GIVR design
* Potential applications of capacitive GIVR design
* Alternative solutions to capacitive GIVR design
* Risks associated with capacitive GIVR design
* Benefits of capacitive GIVR design in different applications
* Measurement of capacitive GIVR design performance

# Report location:

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