



### Why Change

- > No trade-offs between increased flight time and increased payload
- > Easily configured for different applications



### Application Background

The customer's goal was to reduce airframe weight and increase performance in order to maximize available payload and flight time. As the end-user market is rapidly changing the design needed to be readily adaptable to different requirements and payload configurations.

### Challenges

The power source varies from application to application depending on payload requirements and the desired range. A flexible power architecture is required that can be adapted quickly to different demands. The customer is aiming to become the leader in this relatively immature market, maximizing market share early on and therefore optimizing their financial return in the long term.

### Why Vicor?

Vicor's modular power components provide the highest power density and lowest weight in the industry. Architecting the system using the Power System Designer tools allowed rapid, virtual evaluation of different solutions and trade-offs in weight and performance to be made. The final design was rapidly prototyped with no surprises in overall performance. Power system weight was 30% of the competitive brick offering.

[Link to Whiteboard »](#)

Power Supply Specifications	
<b>Input</b>	3-Phase, 115V AC 400 Hz
<b>Outputs</b>	50V Bus and 24V Bus
<b>Load</b>	Avionics: Processor and sensors

