Saltwater Power Generator - Case Form Factor

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Agenda

What is WiGL SWPG | **SWPG Case** | **Demo**

- ❑ Introduction

- ❑ Performance
- ❑ Features
- ❑ Operation

Demonstration

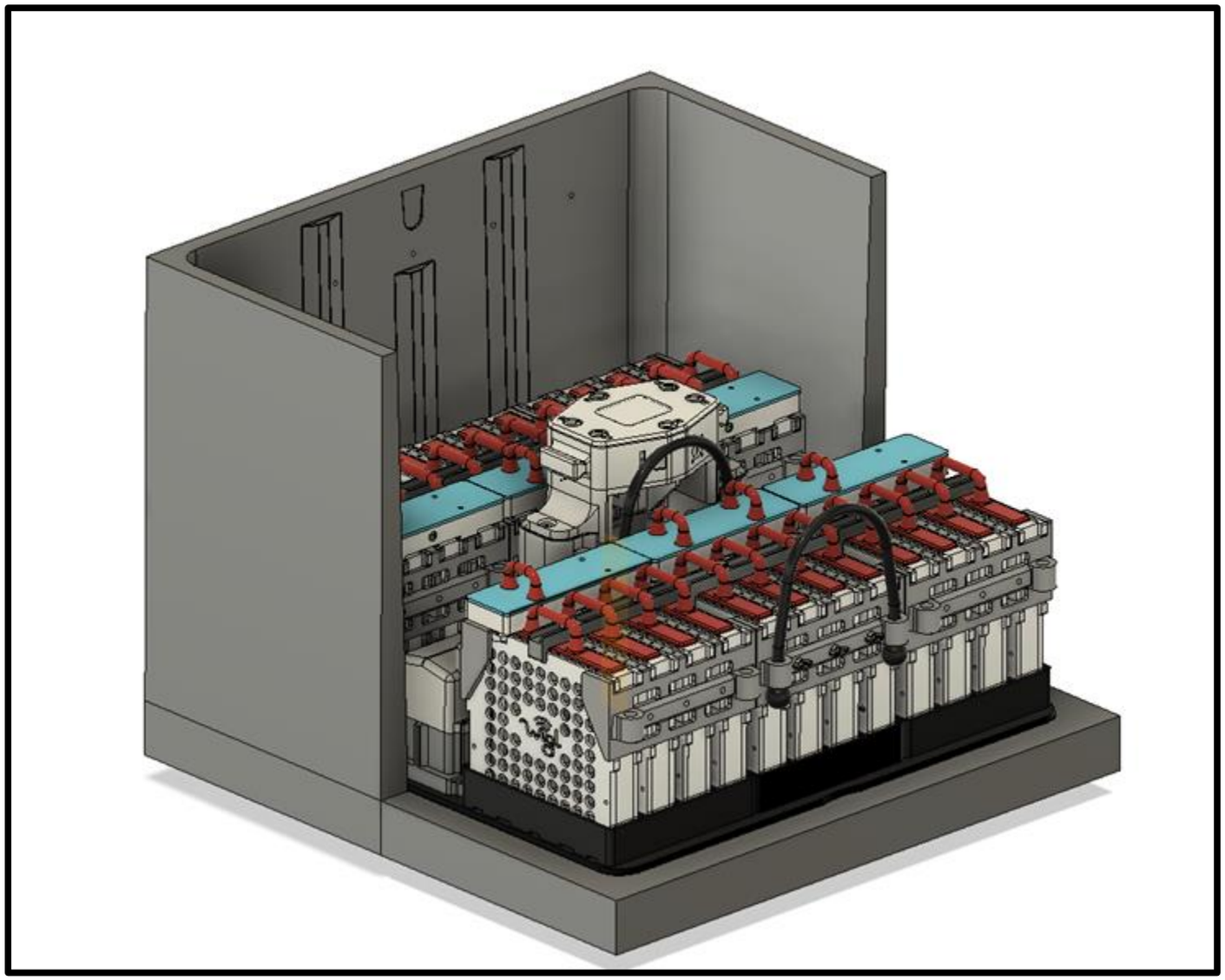
Note: While there are no products on contract, WiGL intends to demonstrate and deliver these products to support immediate mission needs.

Introduction to WiGL SWPG

The SWPG family of products revolve around a fresh look into the world of air metal batteries. Contrast to many air metal battery designs, WiGL has chosen to move past niche electrolytes, noble metal cathodes, and sensitive electronics. Instead, WiGL has been focusing on robust, scalable, adaptable products, utilizing readily available electrolytes and magnesium. These batteries have been validated in form factors ranging from water bottles to backpacks targeting a wide variety of market use cases.

SWPG - Case Formfactor

The SWPG Case formfactor is the largest member of WiGL's SWPG Family. It Contains 24 Air-Magnesium battery cells that fit within a 2ft x 2ft x 2ft Pelican Case.



Features

The SWPG Case is the proving grounds for technological advancements not found/needed in smaller versions. The standalone features are as follows:

- ❏ The case focuses on supporting instantaneous discharge requirements by utilizing a power bank of three 12v 10Ah Lithium Iron Phosphate Batteries

- ❏ A fully integrated cell/battery management system, enabling selective charging/discharging of the integrated power bank

- ❏ Supports USB A/C , and 12v barrel jack charging simultaneously
- ❏ Dual Cathode (air-mesh interface) Design

- ❏ Improved UI (Screen) for user notifications

- ❏ Cell Monitoring output monitoring and alerts

SWPG Case High Level Performance:

Discharge

- ❑ 120w @ 12v Peak output, discharge curve changes as the battery bank capacity depletes.

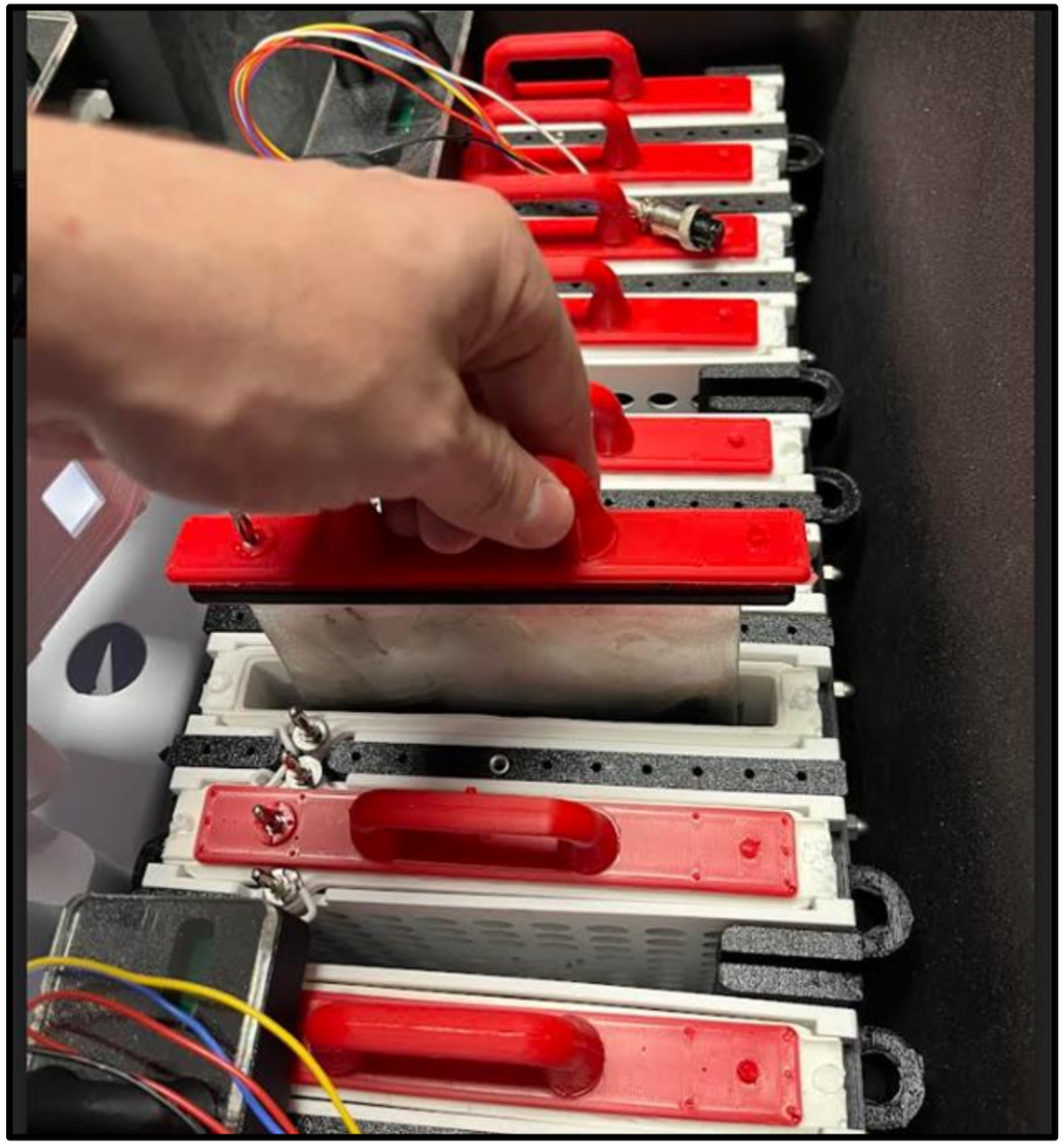
- ❑ Once one cell in the power bank is depleted the system recharges that cell while outputting from a fresh cell. The system will continue in that pattern until all cells are depleted. It then begins monitoring cells and allows bursted discharge as the cells recover.
- ❑ Re-charges the power bank at 27w

- ❑ Approximately one week of constant use before MG plates need to be replaced. Water needs to be switched on a daily basis.

Storage: The SWPG should remain dry without an electrolyte mixture until it is ready for use. The system can be stored with salt prepared in the reservoir if the environment is dry.

Preparation for use: Add water to the system (1 g NaCl to 12.61 ml) and turn the system on.

Maintenance: Cleaning should occur after 24 hours of continuous use to remove the magnesium hydroxide. Plate should be replaced every week of usage (even if sitting under no load).



SWPG Demonstration