



# VANGUARD

## EQLAB



# MAXIMISING BATTERY POTENTIAL

**EqLab created an off-grid multi-purpose power source with the Vanguard™ Si1.5 swappable commercial battery**

Smart e-mobility solutions provider EqLab AB is a Swedish tech business focused on electrification of technology for mobile machinery. Providing engineering proficiency to OEMs, EqLab AB offers comprehensive solutions for integrating batteries, inverters, sensors, motors and more. Fascinated about the possibilities of Briggs & Stratton's Vanguard™ 48V 1.5kWh\* swappable commercial battery (Si1.5), Vanguard Technology Partner EqLab identified an opportunity to leverage the power delivered by this game-changing battery when not in use on an application.

The idea was that customers already using, or considering using, the battery could take further advantage of the Si1.5 to power other smaller

electrical devices, such as chargers, laptops or cooking units, when on-site in remote locations with no access to a reliable electrical grid.

The resulting EqLab Portable Powerbank is essentially a mobile power station that delivers a continuous 230V power supply through the Vanguard swappable battery pack. It ensures the uninterrupted operation of various tools and devices, regardless of location, using an advanced power management system to maximise efficiency and reduce energy waste. Built from rugged, weather-resistant materials, the Portable Powerbank is resilient and suited to harsh conditions while remaining lightweight and easy to transport, a significant benefit when compared to existing, more cumbersome options like petrol inverter generators.

\* Total energy measured using a 0.2C discharge per IEC 61960-3:2017

Owner and Founder of EqLab AB, Anders Olsson, says, “If you have the Vanguard Si1.5 battery then you already have the power; the EqLab Portable Powerbank simply provides the power outlet wherever you are. The idea was to be cost-effective and enhance efficiency by allowing the battery to be used for other applications, making this product an ideal option for rental companies.”

Developed with remote or off-grid locations in mind, the EqLab Portable Powerbank is ideally suited to construction sites, remote operations, and outdoor events. It ensures dependable power wherever it is required by removing the need for a direct electrical supply, thereby facilitating flexibility and reduced operational costs. It also provides a workable solution for noise-sensitive areas, such as residential neighbourhoods, thanks to its quiet operation and low environmental impact.

Several features of the Vanguard 48V 1.5kWh swappable commercial battery made it the right choice for the EqLab Portable Powerbank. Vanguard batteries come with a market-leading 8-year global

warranty\*\*, providing long-term assurance and support for rental companies. They are also known for their high performance and uninterrupted operation in demanding environments, such as construction sites. Vanguard’s unique swappable battery allows for quick and easy battery changes, delivering reduced downtime, improved productivity, and an indefinite operational time. Combined with efficient resource reallocation, these features come together to deliver streamlined operations and a reduced total cost of ownership.

The Portable Powerbank has a particular appeal for any rental companies, and their customers, who already have Vanguard batteries in their inventory, as it immediately diversifies their potential use. The efficient utilisation of existing resources is a priority for rental businesses and the Powerbank inverter delivers exactly this by making the Vanguard Si1.5 even more multi-purpose.

While the development and design phases of the EqLab Portable Powerbank were completed quickly, significant time was invested in testing



Anders Olsson with his Powerbank at the Executive Hire Show 2024

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**IF YOU HAVE THE VANGUARD  
Si1.5 BATTERY THEN YOU  
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POWERBANK SIMPLY PROVIDES  
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RENTAL COMPANIES.**

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Anders Olsson  
Owner and Founder of EqLab AB

\*\* see [www.vanguardpower.com](http://www.vanguardpower.com) for warranty details



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**THE EQLAB PORTABLE POWERBANK IS AN INNOVATIVE SOLUTION THAT LEVERAGES VANGUARD BATTERY POWER AND PUTS IT TO FURTHER USE WHEN IT IS NOT REQUIRED FOR AN APPLICATION.**

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Paul Bramhall  
Director of Electrification/Rental EMEA  
Briggs & Stratton



and certification. For seamless integration, the Powerbank inverter's compatibility with Vanguard battery packs was first ensured. Following this, continuous monitoring of performance and usage identified any areas for further optimisation or efficiency improvements. Finally, rigorous testing and certification validated the EqLab Portable Powerbank for high performance and safety standards.

Paul Bramhall, Director of Electrification/Rental EMEA at Briggs & Stratton says, “The EqLab Portable Powerbank is an innovative solution that leverages Vanguard battery power and puts it to further use when it is not required for an application. The Vanguard 48V 1.5kWh swappable commercial battery can already be used in multiple applications from diverse brands and the development of the Powerbank takes this flexibility one step further, making it even more useful on the jobsite. Coupled with the EqLab Powerbank inverter, the Vanguard battery's reliability, durability and 8-year warranty make the EqLab Portable Powerbank an enormously beneficial power solution especially for the rental market.”



**48V 1.5KWH<sup>1</sup>**  
**COMMERCIAL BATTERY**  
**SWAPPABLE BATTERY - Si1.5**

This battery pack offers the ability to swap out between applications on the job site, reducing downtime, and featuring multiple mounting configurations, ensuring flexibility for any situation.

- **Operational Confidence:** Integrated Battery Management System (BMS) constantly monitors and measures the pack's voltage and temperature to ensure safe and efficient operations.
- **Flexibility:** Single CANbus J1939 communication protocol allows OEMs to communicate with the battery's J1939 (automotive standard) CANbus.
- **Increased Uptime:** Up to 1000-cycle life to 80% initial capacity.

<b>NOMINAL VOLTAGE (V):</b>	51,4
<b>NOMINAL CAPACITY<sup>2</sup> (Ah):</b>	28,4
<b>NOMINAL DISCHARGE CURRENT (A):</b>	100
<b>CHARGE TIME TO 100% WITH 1425W CHARGER<sup>3</sup> (MIN):</b>	75
<b>PACK WEIGHT (KG):</b>	11,8

<sup>1</sup> Total energy measured using a 0,2C discharge per IEC 61960-3:2017

<sup>2</sup> PER IEC61960

<sup>3</sup> Based on nominal temperatures, charge will vary at the extremes

# CONTACT US NOW

## TO FIND OUT HOW VANGUARD CAN HELP YOU POWER YOUR EQUIPMENT



Contact us via email to: **[vanguardpower.emea@basco.com](mailto:vanguardpower.emea@basco.com)**



Find out more about Vanguard on: **[www.vanguardpower.com](http://www.vanguardpower.com)**



For more news and updates, follow us on LinkedIn:

**<https://www.linkedin.com/company/vanguard-power-emea/>**

### ABOUT BRIGGS & STRATTON | VANGUARD

Briggs & Stratton, headquartered in Milwaukee, Wisconsin, provides innovative products and diverse power solutions to help people get work done. Briggs & Stratton is the world's largest producer of engines for lawn and garden, turf care and job site power equipment and is a leading designer, manufacturer and marketer of lithium-ion batteries, standby generators and energy storage systems through its Briggs & Stratton®, Vanguard®, Ferris®, Simplicity®, Snapper®, Billy Goat®, Allmand®, Branco® and Victa® brands. Briggs & Stratton products are designed, manufactured, marketed and serviced in over 100 countries on six continents.

Vanguard helps professionals to get their work done by applying power to their unique commercial applications. For more than 35 years, Vanguard has partnered with customers to conquer challenges and develop innovative products. As Vanguard doesn't simply provide components, it supports customers in applying commercial lithium-ion and petrol power throughout the entire integration process, from development to serial production to after sales and training support. [www.vanguardpower.com](http://www.vanguardpower.com)

### ABOUT EQLAB AB

EqLab AB offers engineering proficiency to OEMs, with a focus on electrification technology for mobile machinery. They offer comprehensive solutions for integrating batteries, inverters, motor controllers, battery management systems, and sensors, as well as AC, PMAC, BLDC motors, and more. With expertise in control systems such as Programmable Logic Controllers and Displays, and high-quality courses to support professional development, EqLab provides a tailored project management service to ensure successful project implementation for its customers and partners. <https://www.eqlab.se>

# VANGUARD

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