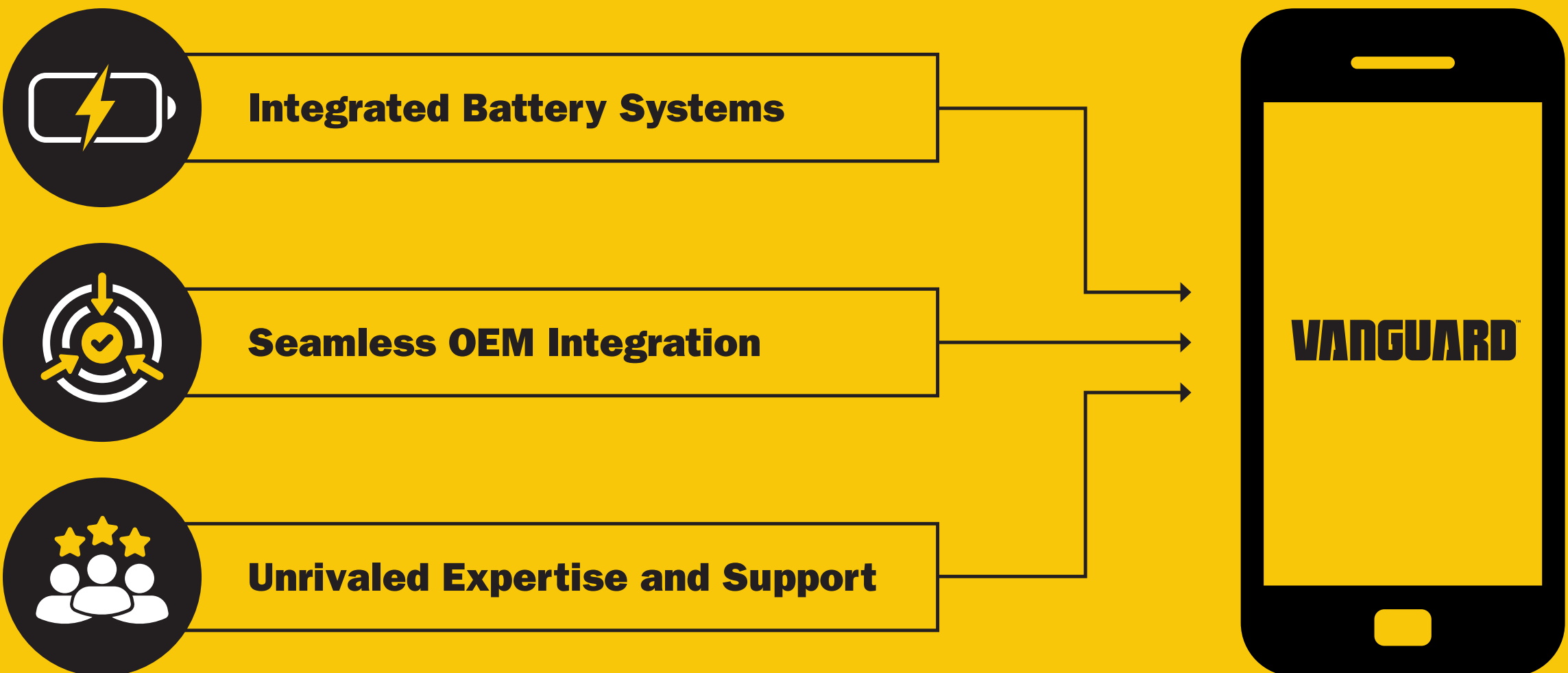


# THE VANGUARD ELECTRIFICATION ECOSYSTEM MAP

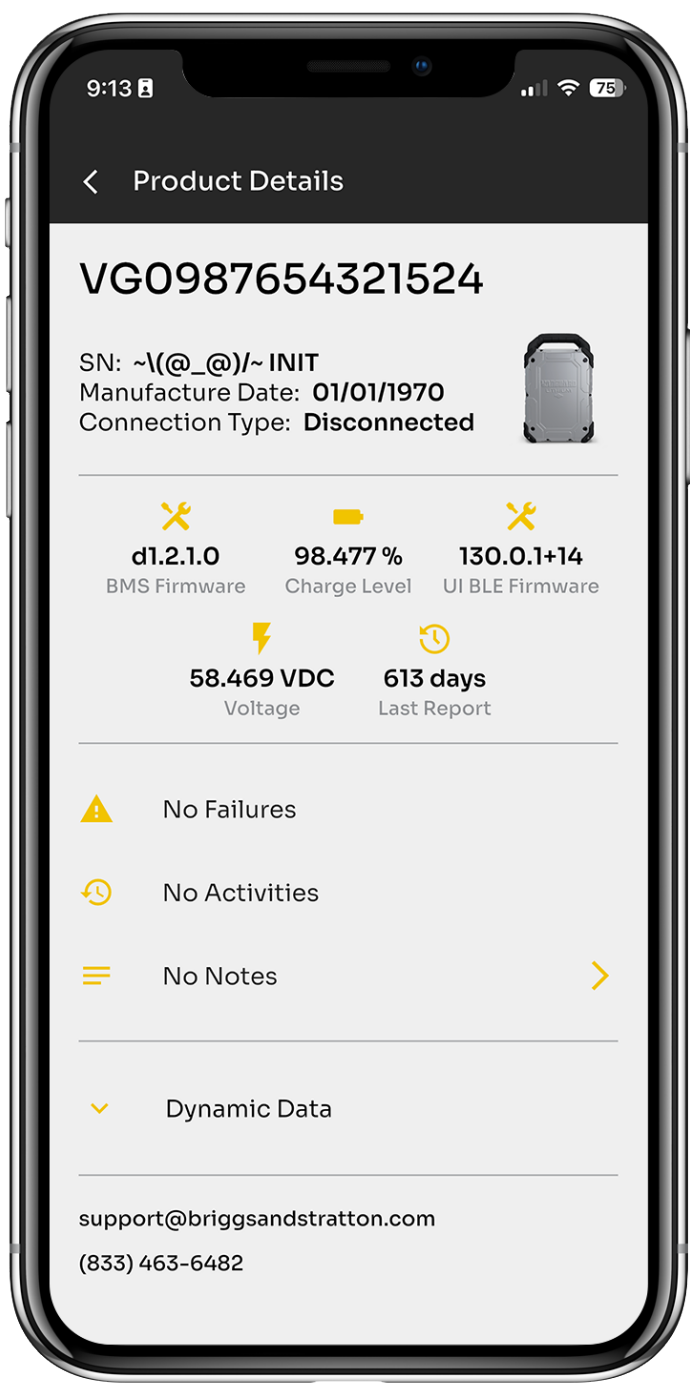
See how Vanguard™ batteries, integrated systems and expert partners all connect on one powerful new platform.

## THE NEW VANGUARD MOBILE APP



## YOUR ENTIRE ECOSYSTEM, IN YOUR POCKET.

A better experience for your customers. A more powerful support tool for you.



**GET LIVE STATUS UPDATES**

Connect to the battery's integrated Battery Management System (BMS) via Bluetooth® to get real-time performance data. Monitor state of charge (SOC), voltage, amperage and temperature from the palm of your hand.

**TAKE TOTAL CONTROL**

Put more control and information directly into the end user's hands. Perform over-the-air (OTA) firmware updates easily to ensure that the battery is running with the latest features and improvements.

## THE POWER BEHIND THE PLATFORM

### INTEGRATED BATTERY SYSTEMS

**A Total Power Solution**

The core advantage of the Vanguard ecosystem is its comprehensive design. We deliver the entire power system — including the lithium-ion battery with its BMS, motors, motor controllers and chargers. This is your easy integration toolbox that streamlines your engineering workload and ensures that all components are optimized to work together.

Our battery lineup features a pack for every application, from the swappable **Si1.5** to the robust **Fi Series™** (Fi1.5, Fi3.5, Fi5.0 and Fi7.0). All are designed, engineered and assembled in the U.S. and backed by an eight-year commercial limited warranty.\*



### DESIGNED FOR YOUR EQUIPMENT

**Built for Seamless Connection**

Our systems are built to connect effortlessly with your machines. The Fi3.5, for example, features dual CANbus ports — one using the J1939 automotive standard and another for simple data transfer with your existing network: no reprogramming required. This built-in communication allows the battery, your machine and the motor controller to all “talk” the same language, providing a complete performance picture.



### UNRIVALED EXPERTISE AND SUPPORT

**Your Partner in Electrification**

- Whether you need our world-class test labs or a hands-on partner to manage the integration, our engineering support system is built for you.
- **Power Application Centers (PACs)**  
Our in-house engineers use state-of-the-art labs to identify, test and optimize the complete power solution for your equipment.
  - **Battery Technology Partners**  
This network of specialized companies provides hands-on, detailed **engineering expertise** for your project, alleviating the need for you to have a dedicated in-house electrical engineering team.



**DISCOVER WHAT IT'S LIKE TO WORK WITH ONE OF OUR BATTERY TECHNOLOGY PARTNERS.**

See how Vanguard and Kraft Fluid Systems help Allen Engineering® reach zero-emissions status by electrifying a concrete buggy.

[LEARN MORE](#)



**Take the Next Step in Your Electrification Journey**

Ready to see how Vanguard's integrated battery systems can power your next project? Contact a Vanguard expert today to discuss your electrification goals.

[Get Started With Vanguard](#)