ALL POWER. NO NOISE.

How Mi-T-M and Vanguard Engineered a Game-Changing Product.
Powered by Vanguard™ Fi 5.0kWh and Fi7.0kWh Commercial Battery Packs.

Two industry leaders united to meet the market's demand for versatile, silent portable power through a partnership built on shared vision and engineering excellence.

The Problem: Mi-T-M® Corporation (Mi-T-M) identified a critical gap in the market: The industry needed a robust portable power solution that could be operated indoors and in noise-sensitive environments. While traditional gas engines are effective, their noise, fumes and maintenance logistics have long restricted where and how portable power could be used.

The Solution: Mi-T-M delivered the answer with the ePowerStation™, a game-changer for the rental and equipment industries. By replacing the gas engine with advanced battery technology, Mi-T-M created a unit that is quiet enough for entertainment sets and rugged enough for construction sites. However, this transition wasn't a simple swap; it required a strategic partnership capable of delivering comparable performance, safety and a sustainable lifecycle.

Keep reading to see how Vanguard and Mi-T-M collaborated to engineer a solution that redefines rental power.

FROM THE VERY FIRST PHONE CALL DURING THE DEVELOPMENT PHASE TO NOW, VANGUARD WAS ABLE TO ADDRESS EVERY QUESTION WE HAD AND COULD POINT US IN THE RIGHT DIRECTION.

Dave Thiesse

Vice President of Commercialization at Mi-T-M

The partner: Why Vanguard?

Mi-T-M sought to create a product that was versatile, moisture-resistant and simple to operate. The goal was to remove the barriers of gas power — noise, emissions and fuel costs — without sacrificing reliability.

To translate this vision into reality, Mi-T-M needed more than off-the-shelf components. When evaluating a battery technology provider, Mi-T-M looked beyond basic specifications like voltage and capacity, knowing they needed a true partner to navigate the engineering challenges of electrification.

"From the very first phone call during the development phase to now, Vanguard was able to address every question we had and could point us in the right direction," said Dave Thiesse, Vice President of Commercialization at Mi-T-M. "They have been very supportive of a product that was new technology for our company."

Vanguard was selected not just for its lithium-ion technology, but for its holistic approach to electrification:

Safety and Sustainability: A major consideration for Mi-T-M was end-of-life recycling. Vanguard's established recycling capabilities provided the necessary assurance for a long-term product lifecycle.

Domestic Manufacturing: The ability to partner with a team backed by a U.S. manufacturing facility was a determining factor. The partnership began with a visit to the Vanguard facility in Tucker, Georgia, where Mi-T-M could see the manufacturing capabilities and witness firsthand how the technology was produced.

Product Advocate: Beyond engineering integration, Vanguard served as an active champion for the product. They supported Mi-T-M from ideation to market launch, leveraging their industry presence to help identify new "homes" and applications for the ePowerStation™.

Mi-T-M CORPORATION

*Total energy measured using a 0,2C discharge per IEC 61960-3:2017. [1] PER IEC61960 [2] Based on nominal temperatures, charge will vary at the extremes.

Fi5.0

3000W | 86 LBS

The Fi5.0 model features an 86 lb (39 kg) Vanguard battery paired with a 3000W inverter. This combination creates a lightweight powerhouse with a 250 lb (113 kg) total unit weight, offering exceptional mobility for any jobsite.

Fi7.0

6000W | 102 LBS

For heavy-duty demands, the Fi7.0 model integrates a 102 lb (46,3 kg) Vanguard battery with a 6000W inverter. This 305 lb (138 kg) total unit weight delivers 40% longer runtime than the Fi5.0 model

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The power inside: rugged intelligence

The ePowerStation is available in two models, powered by the Vanguard Fi5.0 (5kWh) and Fi7.0 (7kWh) fixed lithium-ion battery packs. These configurations define the unit's capability and versatility.

Vanguard battery packs are engineered specifically to withstand the use and abuse of the rental market, featuring:

Diecast Durability: The Cell Module Assembly (CMA) units are protected by a diecast aluminum enclosure, offering maximum protection against impact, vibration and extreme temperatures. With an IP56 rating, the Fi5.0 and Fi7.0 batteries ensure a high level of protection against dust and water. This was critical for the ePowerStation, which features a rugged frame and tires designed for rough terrain.

Intelligent Management: A proprietary Battery Management System (BMS) constantly monitors voltage and temperature to ensure safe, efficient operations.

Advanced Water Resistance: Both battery options feature an advanced water-resistant design built to withstand the elements. This robust construction is the ideal solution for this application, providing the critical protection needed to keep the unit moisture-free.

The business case for Lithium-Ion

For OEMs and rental operators, the transition to lithium-ion is a business decision driven by total cost of ownership (TCO) and operational versatility.

While the upfront investment in lithium-ion technology differs from gas, the operational reality reveals a compelling advantage. The ePowerStation eliminates fuel logistics and maintenance costs while unlocking revenue streams in noise-sensitive and indoor environments where gas generators are prohibited.

> **GO TO A FARMER'S MARKET SOMETIME WHERE A FOOD TRUCK IS USING A GAS GENERATOR AND TRY TO HAVE A CONVERSATION. THEN, GO TO THE SAME FOOD VENDOR USING AN EPOWERSTATION AND TELL ME WHAT YOU HEAR ... NOTHING.**

Gerry Hess

Senior Product Manager at Mi-T-M

FEATURE	LITHIUM-ION (EPOWERSTATION)	TRADITIONAL GAS GENERATOR
Noise Level (dBa)	Virtually Silent (Quiet electrical hum; no engine roar)	75-90 dBa
Maintenance	**Cost:** $0 Maintenance (No oil, filters or spark plugs required.)	**Cost:** $75/year Includes regular replacement of oil, filters and spark plugs, plus required engine service.
Refueling[1]/ Recharging	**Hourly Cost:** $1.26 per hour (based on the national average of 18¢ per kWh) **Recharge Time[2]:** Fi5.0: 2.5 hrs | Fi7.0: 3 hrs	**Hourly Cost:** $2.69 per hour (based on the national average of $2.95 per gallon) **Logistics:** Requires ongoing fuel transport, on-site storage and manual refueling.
Emissions	Zero operating emissions and is safe for indoor/enclosed use	EPA certified for outdoor use only due to fumes
Lifespan (Estimated Runtime)	3,000–10,000+ running hours (Dependent on workload intensity and regular care)	1,000–2,000 running hours (Dependent on regular care)
Warranty (Power System)	8-Year Limited Commercial Warranty (Vanguard™ Battery)	Varies (Engine warranties typically shorter)

[1]**Technical Note:** Comparative Operational Analysis
Note on Methodology: Operational costs are calculated based on national average utility rates for the United States as of early 2026. The ePowerStation energy cost is based on an average rate of $17.78 cents per kWh. The traditional gas generator fuel cost is based on a national average of $2.95 per gallon.

The Math:
- ePowerStation: Calculated at $1.60 per hour of runtime at full load.
- Gas Generator: Calculated at $2.69 per hour of runtime at full load.
- Maintenance: To ensure an accurate Total Cost of Ownership (TCO) comparison, refueling/energy costs have been separated from physical maintenance. Gas generator maintenance includes localized cost of oil, filters, spark plugs and required service intervals, which are $0 for the Vanguard battery system.

[2]With the Vanguard 3000W battery charger

Why choose ePowerStation?

By integrating Vanguard's advanced lithium-ion technology, the ePowerStation™ delivers advantages that standard generators cannot match:

Start-up and Continuous Power: The unit provides the high start-up power strength needed for industrial tools while delivering the steady continuous power safe for sensitive equipment like laptops and phones.

Intelligent Efficiency: Range anxiety is eliminated via a digital display that actively calculates runtime based on applied loads, along with a built-in calculator for planning.

Simultaneous Charging: Productivity doesn't stop for a recharge. The Vanguard battery and charger allow for pass-through charging, meaning the unit can be charged while simultaneously powering equipment.

Silent Operation: With no fumes and a fully recyclable battery system, the unit is safe for indoor use and virtually silent, opening doors to events and film sets.

Advice for the industry

The success of the ePowerStation demonstrates that electrification is no longer just an alternative — it is an upgrade. Partnering with Vanguard allowed Mi-T-M to navigate the shift to electrification with confidence, resulting in a machine that is as rugged as it is innovative.

For other OEMs navigating this transition, Thiesse, Vice President of Commercialization at Mi-T-M, offers direct advice: "Take a leap, power up and be on the forefront of technology."

The ePowerStation is not just a portable power solution; it is a testament to what happens when innovative engineering meets the right power partner.

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