MARSTEK Officially Launches VENUS E 3.0: The Next-Generation Plug-and-Play AC Battery Storage System for Modern Homes

August 25, 2025 — MARSTEK, a leading innovator in energy storage, proudly announces the official global launch of VENUS E 3.0, the latest generation of its popular balcony and residential energy storage solution. Designed with simplicity, flexibility, and performance at its core, MARSTEK VENUS E 3.0 is now available worldwide, offering homeowners smarter and more accessible energy independence.

Evolved Design and Connectivity

Compared to its previous generation, VENUS E 3.0 introduces a sleeker, more compact form factor with an all-in-one metal enclosure that enhances both durability and visual appeal. The housing has been reengineered to reduce installation space, while maintaining IP65-rated protection for year-round outdoor use. Additionally, the new model features an added LAN port, enabling stable wired communication in complex networking environments.

Plug-and-Play AC Battery with Backup Capability

VENUS E 3.0 is a plug-in AC battery energy storage system featuring 2.5kW input, 800W/2.5kW output, and 5.12kWh of LFP storage. With integrated backup functionality and seamless 15ms switchover, it ensures continuous power to essential loads during grid outages — ideal for apartments, balconies, summer homes, and RVs.

Smarter Control with AI Optimization

The system features an Al-based optimization mode that analyzes home energy profiles, real-time pricing, and load patterns to maximize cost savings. For enterprise users, manual TOU scheduling is available for configurable charging/discharging strategies, helping them profit from variable electricity tariffs.

Modular, Scalable, and Compatible

VENUS E 3.0 supports parallel operation — up to 3 units for single-phase and 9 units for three-phase setups, scaling output to 22.5kW and capacity up to 46.08kWh. It is also fully compatible with existing PV systems, enabling easy retrofits or upgrades without inverter changes.

Built for Efficiency and Durability

With IP65-rated aluminum die-cast housing, a sleek full-mirror LED panel, and a wide operating temperature range of -20° C to $+55^{\circ}$ C, VENUS E 3.0 delivers robust outdoor reliability. The system boasts a >93.5% battery-AC efficiency and DoD >90%, offering 6000+ cycles and long-term energy resilience.

VENUS E 3.0 reaffirms MARSTEK's commitment to delivering smarter, safer, and more flexible energy storage for every home — whether on a balcony, in a garage, or beyond.

About MARSTEK

MARSTEK is a leading brand in energy storage with vertically integrated capabilities spanning R&D, manufacturing, and marketing, providing comprehensive energy storage solutions for global clients. Established in 2009, the company offers a full portfolio covering residential ESS, balcony storage systems, portable power stations, power banks, and rechargeable AA & AAA Li-ion Batteries. With operations across China, Germany, the U.S., Japan, and Africa, MARSTEK is committed to making clean energy easier to install, easier to use, and easier to trust.