

30.04.2025 - 09:35 Uhr

# IPS Unveils EXERON X-BESS 8 - A Breakthrough in Utility-Scale Battery Energy Storage



Sofia (ots) -

IPS proudly announces the launch of the EXERON X-BESS 8, its latest innovation in utility-scale battery energy storage systems (BESS), set to debut at ees Europe 2025 in Munich, from May 7-9.

A decade after winning the Electrical Energy Storage Innovation Award at Intersolar 2014, IPS continues its legacy of innovation with this cutting-edge BESS solution.

# Game-Changing Technology for Maximum Capacity, Minimal Footprint.

The X-BESS 8 delivers an industry-leading 8.1 MWh of total battery capacity paired with an integrated 4 MW inverter, all packed within a 20-foot container footprint equivalent-a new benchmark for power density and space efficiency in large-scale applications.

"Leveraging our decades-long experience in turnkey microgrid solutions servicing critical loads, we have engineered an all-in-one system addressing key constraints of BESS project development and operation", says Alexander Rangelov, CEO at IPS.

"On the CAPEX side, the compact, modular architecture allows for effortless customization and future-proof scaling while significantly reducing costs for balance of system (BOS), transportation and installation, compared to BESS set-ups with separate enclosures for ESS, PCS and auxiliary systems. On the OPEX side, easy maintenance and reliable operation over the full lifespan of the system is ensured via distributed design of all critical components, with no single point of failure for the overall system," he adds.

## Innovation. Efficiency. Reliability

Designed entirely in-house, the X-BESS 8 features a liquid-cooled, three-level inverter topology that achieves 99.5% efficiency, ensuring optimal performance even under demanding conditions.

The X-BESS system employs a **modular, building-block architecture** to streamline transportation, installation, and scalability while reducing logistics and deployment costs. The system is delivered in segments - lightweight, sub-8-ton blocks, that require no specialised heavy-lifting equipment for transport or installation. Each block is fully **plug-and-play**, with standardized mechanical and electrical interfaces to ensure rapid, low-complexity on-site integration.

Additional highlights include a proprietary redundant, fault-tolerant liquid cooling system for improved thermal management and long-term reliability as well as the use of high-performance 314Ah LFP cells, capable of up to 12,000 charge/discharge cycles, engineered for zero degradation in battery capacity during the first five years of operation.

Vertically integrated Manufacturing. Made in EU.

The EXERON X-BESS 8 is the result of a **vertically integrated engineering and manufacturing process**, enabling IPS to maintain complete control over every critical subsystem-from mechanical and electrical design to embedded firmware.

Unlike typical BESS solutions that mostly rely on integration of third-party components, IPS designs and manufactures in-house all system components except the LFP cells, including inverters, thermal management systems, battery modules, packs and BESS housing. Critically, all control software and embedded firmware is developed and maintained in strict alignment with EU cybersecurity frameworks. This integrated approach ensures mechanical, electrical, and software subsystems are natively interoperable and optimized for performance, maintainability, and reliability from the ground up.

Moreover, by minimizing reliance on non-EU based suppliers for critical components and control systems, IPS eliminates key vulnerabilities in the supply chain and delivers a system that is **secure and future-proofed** for regulatory and operational resilience.

To address rapidly growing demand for energy storage solutions, IPS is set to open its next automated manufacturing facility in Sofia, Bulgaria, in June 2025. The Class A plant will launch with a 1.5 GWh annual capacity, scaling to 3 GWh by the end of 2025.

#### **About IPS**

Founded in 1989, IPS is an energy technology company specializing in microgrid solutions and battery energy storage systems. With deployments in 59 countries across every continent, IPS serves industries ranging from Energy and Defence to Oil & Gas. The company prioritizes innovation, in-house R&D, and manufacturing to deliver high-performance, sustainable energy solutions.

The EXERON X-BESS series is currently in production with 5 MWh and 6.5 MWh models.

### Visit IPS at ees Europe 2025: Hall C2, Booth 179

Discover the X-BESS 8 and meet the IPS team to learn more about this latest breakthrough in energy storage technology.

For more information, please visit: www.exeron.com

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# Medieninhalte



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