

# Polarium Strengthens Home Offering with new Modular All in One System Featuring Hybrid Inverter and LFP

**Polarium, a leader in energy storage solutions, proudly announces a major upgrade to its Polarium Home solution — now featuring cutting-edge All-in-One LFP (Iron-Based) battery chemistry and a next-generation hybrid inverter. The result is a scalable, efficient, and future-ready energy system. Polarium Home is more than just a battery — it's a platform for energy empowerment.**

With the introduction of a bi-directional hybrid inverter and the customers choice of LFP (Iron-Based) or NMC (Nickel-based) battery chemistry, Polarium Home delivers unmatched flexibility, performance, safety, digital capabilities and AI — while dramatically simplifying installation and reducing overall system costs.

## **All-in-One System Designed for Installers. Built for End-Users. Trusted by Partners.**

Polarium Home is engineered for seamless integration and high-performance, combining advanced hardware, digital capabilities and AI with award-winning Scandinavian design. Whether you're an installer, partner, or homeowner, Polarium Home simplifies your experience without compromising on performance or design. With a modular and configurable portfolio, the system is ready to meet the diverse demands of different markets, use cases, and consumer needs across Europe and the world. Polarium Home is simple to install, easy to use, smart and safe over the entire lifetime.

The system is built for the future. The system and its modular building blocks originate from Sweden where we have designed, developed, and hand-picked every single component, ranging from battery module incl BMS and power conversion, to its intelligent EMS and cloud solution. With over a decade of experience from the telecom industry, we have designed the system to meet the most demanding telecom-grade standards in terms of quality, safety and performance.

## **All-in-One Modularity That Scales with the End-User**

- Scalable in capacity from 6.7 kWh to 220 kWh and in power from 6 kW to 192 kW by connecting 16 Polarium Home systems in parallel side-by-side — perfectly suited for any single-family home, multi-family home or commercial facility energy need.
- Fastest outdoor or indoor installation and commissioning time on the market—averaging just 2 hours including wiring and prep on site, with record installations in only 45 minutes.
- Smart metering, advanced sensors, and integrated heating to optimize performance in all climates.
- Designed for rapid access to ancillary markets across Europe, empowering homeowners and grid operators alike. Open APIs and cloud connectivity enable instant partner integration with existing VPP and EMS platforms.
- Award-winning Scandinavian design, honored with the iF Design Award and Red Dot Design Award 2025.

### **One Unit, Multiple Benefits — The Hybrid Inverter Advantage**

Polarium's hybrid inverter combines solar and battery management into a single, smart unit—eliminating the need for separate installations:

- Compatible with both PV and battery including multiple MPPTs (Maximum Power Point Trackers) rated at 150% inverter capacity ensure optimal solar yield.
- Unique no-DC/DC topology reduces conversion losses, improves performance, and lowers system cost — made for superior energy efficiency and seamless setup.
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- Smart software with cloud connectivity and open APIs allow integration into existing VPPs or partner platforms with no extra investment in site hardware.
- Software-configurable inverter power offers unmatched flexibility across markets and use cases.

### **Safe, Scalable, and Outdoor-Ready — The Modular Battery**

At the heart of Polarium Home is a high-performance, scalable LFP battery, purpose-built for European and global homes and urban commercial buildings where space is a limiting factor:

- Single high-capacity module, scalable from 6.6 to 27.6 kWh.
- Uses cylindrical LFP cells, which are inherently safe due to their pressure-resistant design and robust thermal management.
- Multiple protection levels and integrated BMS (Battery Management System) developed in Sweden for superior data-security, safety and performance.

### **A System Designed to Work — Together**

Polarium's strength lies in collaboration and integration together with and within our ecosystem. We have and will continue to develop our system in close cooperation with installers, partners, and energy service providers. Our system is built on deep expertise in battery hardware and energy optimization, enabling reliable operation across every home. In essence, a smart, premium, and future-ready energy solution—available now.

### **About Polarium**

Polarium is a leading energy storage developer. We make energy storage and optimization solutions built on lithium-ion battery technology for businesses within telecom, commercial, industrial and residential facilities across the world. Polarium was founded in 2015 on the conviction that safe and smart energy storage solutions will be key to empower the transition to a truly sustainable energy future. We are an impact business contributing to the energy transformation by enabling the electrification and intermittent power supply. Our cutting-edge and easily adaptable modular battery technology enables us to be in the forefront of developing state-of-the-art energy storage and optimization solutions for today – and tomorrow. Polarium is headquartered in Stockholm, with production in South Africa and Vietnam, and customers across the world.

Polarium has been recognized by TIME and Statista as one of the World's Top GreenTech Companies of 2025.



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### **Image Attachments**

[PR Home \(1\)](#)

### **Attachments**

[Polarium Strengthens Home Offering with new Modular All in One System Featuring Hybrid Inverter and LFP](#)