



# Thermal Storage Solutions

# OUR MISSION

PhaseStor, with over 35 years of unwavering dedication, has been at the forefront of thermal energy storage technologies. Our commitment to a sustainable future extends beyond innovation—it's woven into the very fabric of our existence. Through rigorous research, cutting-edge solutions, and collaborative partnerships, we've empowered communities and industries alike to embrace energy efficiency and environmental stewardship.

Join us in this transformative journey as we continue to shape a brighter, more sustainable tomorrow for our community and the globe.

Together, we're not just storing energy; we're storing hope.





Net-Zero eco friendly manufacturing



100% non-toxic & biodegradable



Thermal management industry leader

## HARNESS THE HEAT - POWER THE WORLD

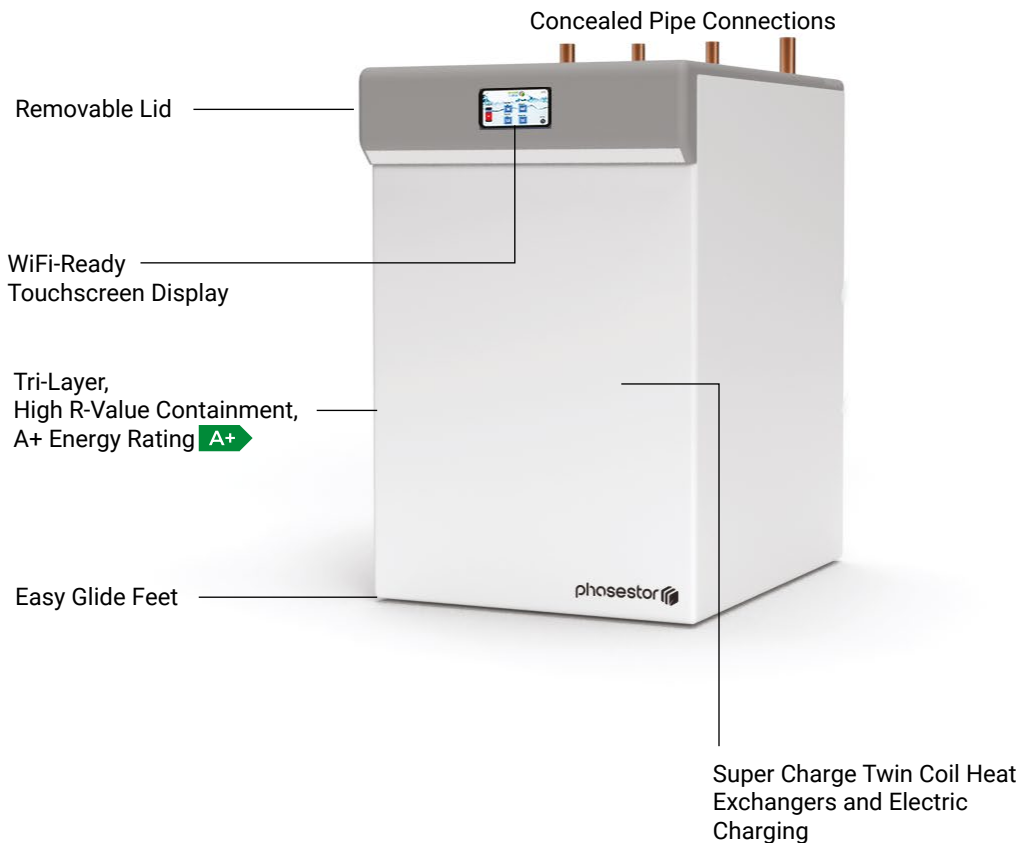
At PhaseStor, we envision a future where thermal energy management is efficient, sustainable, and accessible to all. Our cutting-edge PhaseStor Thermal Storage Batteries empower industries, communities, and individuals to harness the power of thermal energy like never before.

By unlocking this potential, we're shaping a brighter, more sustainable tomorrow—one where energy efficiency and environmental stewardship go hand in hand.

Join us on this transformative journey as we redefine how the world manages and utilizes thermal energy.”

# eSTOR™

## THE WORLDS MOST ADVANCED THERMAL ENERGY BATTERY



### FLEXIBLE

Compatible with ANY Heating or Energy Source including Low-temp Air Source Heat Pumps

### SIMPLE

One model – Available in 3 Sizes. 6 -10 & 12 kW

### SPACE SAVING

Compact design – Single footprint over half the size of equivalent cylinders

### UNIVERSAL

Direct & Indirect system application as standard

### COST EFFECTIVE

High Performance - Energy Efficient – A+ Energy Rating

### FIT & FORGET

Easy to Install - No legionella risk or mandatory annual maintenance.

CONVENTIONAL HOT WATER STORAGE VS eSTOR™ THERMAL STORAGE

# WHY eSTOR™ ?

## FEATURES

- ⊗ Compact design: Space Saving
- ⊗ Compatible with High & Low temp heat pumps
- ⊗ Electric / Solar PV ready
- ⊗ Direct & Indirect models
- ⊗ Sizes: 6kW - 10kW - 12kW
- ⊗ Residential / Commercial / Industrial use
- ⊗ Space heat buffering
- ⊗ Mains pressure hot water delivery
- ⊗ Twin wall insulation / Tri-layer Insulated Casing
- ⊗ Removable lid for easy connections
- ⊗ Easy to install: Minimal pipework and electrical needed
- ⊗ Easy Glide feet included
- ⊗ Future-proof for any energy source

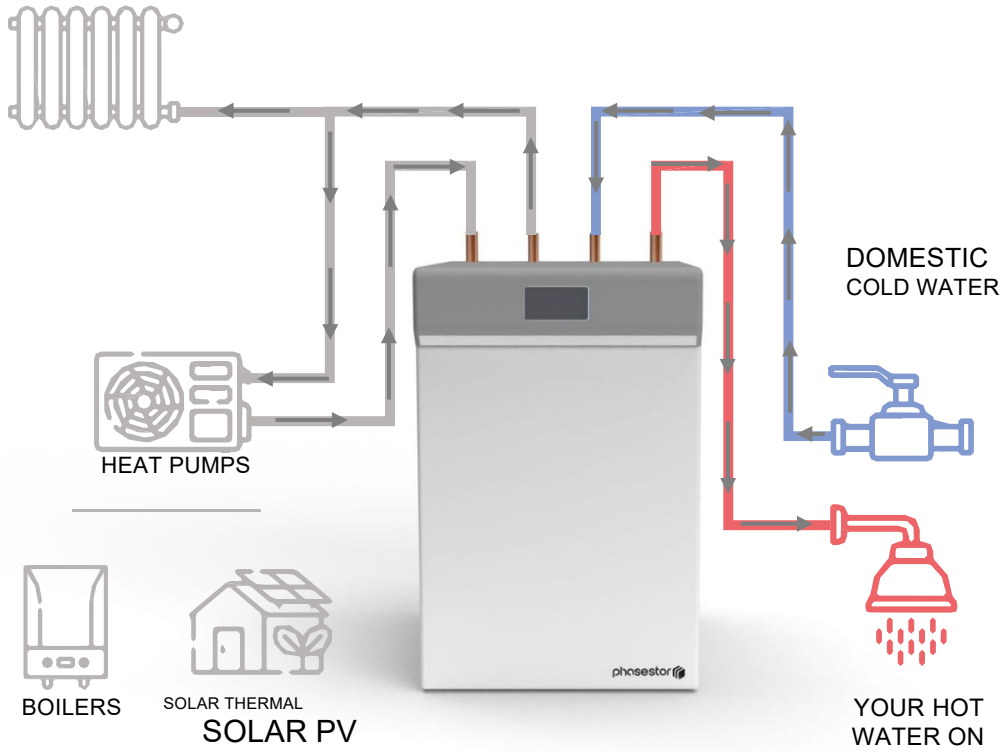


## BENEFITS

- ⊗ 15 Year Warranty
- ⊗ A+ Energy Rating
- ⊗ Ultra Efficient: 50% lower heat loss
- ⊗ No G3 Requirements
- ⊗ No Legionella or high-temp cycling needed
- ⊗ No mandatory annual servicing
- ⊗ Rapid reheating
- ⊗ Efficient heat use
- ⊗ Eliminates need for Buffer tanks
- ⊗ Supports Time of Use Tariffs
- ⊗ Grid balancing & Peak demand management
- ⊗ Patented high latent heat tech: 4x energy storage



# HOW DOES eSTOR™ WORK?

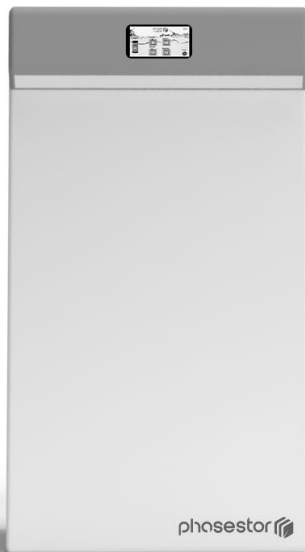


MAINS ELECTRIC

# COMPACT DESIGN



**eS6**



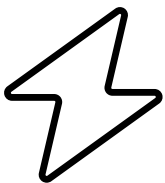
**eS10**



**eS12**

# FLEXIBILITY

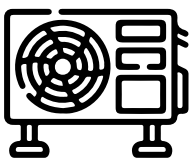
Our eSTOR™ thermal batteries are Compatible with any heat or power source.



MAINS  
ELECTRIC



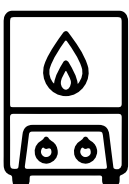
SOLAR THERMAL  
SOLAR PV



LOW & HIGH TEMP AIR  
SOURCE HEAT PUMPS



GROUND SOURCE  
HEAT PUMPS



ELECTRIC, GAS, OIL  
OR HYDROGEN BOILERS



HYDRONIC  
HEAT & COOLING





Product Code	Thermal Storage Capacity			Dimensions (mm)				Pipe Sizing (mm)			Connection Size	
	kWh @ 65°C	V <sub>40</sub> (Ltrs @ 55°C)	V <sub>40</sub> (Ltrs @ 65°C)	Width	Depth	Height	Weight Kg	Heating	Domestic Cold Water	Domestic Hot Water	Heating	Hot & Cold Water
eS6-HW-U	6	90	109	455	595	595	103	28	22	22	1" BSP	3/4" BSP
eS10-HW-U	10	185	218	455	595	910	154	28	22	22	1" BSP	3/4" BSP
eS12-HW-U	12	285	302	455	595	1200	192	28	22	22	1" BSP	3/4" BSP

Product Code	Connected Electrical Load @ 230V - 50hz (W)	Power Supply	Working Pressures (Bar)		Recommended Flow Rate (Ltrs)		Hot Water Temperature Range *C	Heat Source Flow Temp *C		Heat Loss Rate kWh/24	Energy Efficiency Rating
			Min	Max	Min	Max		Min	Max		
eS6-HW-U	2800	1PH / 230V	1.5	10	2	10	45-60	55	80	0.65	A+
eS10-HW-U	2800	1PH / 230V	1.5	10	2	15	45-60	55	80	0.74	A+
eS12-HW-U	2800	1PH / 230V	1.5	10	2	20	45-60	55	80	0.83	A+

Product Code	Application	Compatibility (Primary Heat / Energy Source)									
		Boiler	Low Temp ASHP	High Temp ASHP	GSHP	Solar PV	Solar Thermal	Mains Electric	Off Peak Tariff Capability	Emergency Electric Back Up	Smart / Wi-Fi Enabled
eS6-HW-U	Hot Water	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
eS10-HW-U	Hot Water	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
eS12-HW-U	Hot Water	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y






## GRID BALANCING

Energy density and retention are key for supporting the national grid, enabling utility providers to shift loads and plan usage optimally. High-density energy storage allows for load shifting to off-peak times, reducing strain during peak demand. This enhances grid stability, promotes cost-effective distribution, and facilitates long-term planning for future demand fluctuations. In summary, energy density and retention are vital for grid efficiency and resilience.

## COST EFFECTIVE

eSTOR™'s exceptional energy density and retention assists the national grid and utility providers with a load shifting option for optimal time of use planning. Giving home-owners the ability to store thermal energy during off peak hours saves money, supports a more stable grid and maintains comfort.

- Reliable Heating 
- Faster Heating 
- Smarter Heating 

Thermal batteries can store & save energy in many forms...Discover our other solutions



## IceStor®

IceStor® is a time-tested thermal storage technology that strategically reduces cooling load demand. Easily integrated into new or existing systems of any size. Installing IceStor® would generate immediate savings and shields against rising energy costs.

## TRUe Portable

TRUe portable units are designed to cater to a wide range of applications in the logistics industry, cold storage facilities, and industrial settings. Whether it's heating or cooling, this reliable unit ensures optimal temperature control wherever it's needed.



## Cold Chain Logistics

We have the capabilities of managing the cold chain from start to finish. A complete Last-Mile approach, with sustainability at the forefront.

## eSTOR™ Mod

The eSTOR™ Mod harnesses thermal energy efficiently, offering versatile applications such as cooling or heating buildings, and improving manufacturing processes.





# LET'S CONNECT

## SHAPING A GREENER TOMORROW

Our cutting-edge technology revolutionizes energy storage, offering unparalleled efficiency and reliability. With eStor™, you can optimize your energy usage, reduce costs, and contribute to a sustainable future.

Connect with us to learn more about how eStor™ can transform your energy needs. Join the energy revolution with eStor™ today.



## CONTACT US

### UK/Europe

info@phasestor.co.uk  
0800 702 2627  
www.phasestor.co.uk

### USA

336 629 3000  
info@phasestor.com  
www.phasestor.com

**LinkedIn** [www.linkedin.com/company/phasestor](https://www.linkedin.com/company/phasestor)

## DISTRIBUTOR

[www.phasestor.com](http://www.phasestor.com)