

Residential DHW System

Heat Pump + Thermal Storage Tank + Control Dashboard

An integrated residential domestic hot water platform combining an advanced air-to-water heat pump, stainless-steel heat exchanger, and 80-gallon thermal storage tank. The system captures and stores thermal energy for later use and quickly delivers when you need it most. Significantly reducing energy consumption.

The tank is a modular construction with each component fitting through a standard doorway and weighing in at 63 lbs. when fully assembled. The tank allows for easy install, even in hard-to-reach boiler rooms or basements. While the heat pump weighs in at 96 lbs. and plugs into a standard 120V circuit.



SMART DESIGN, REAL BENEFITS

Smarter

Intelligent controls run the system to maximize savings for the user.

Cleaner

Heat pumps create considerably lower emissions and are becoming the standard in meeting emissions goals.

Flexibility

Modular and lightweight tank construction fits easily into most spaces, with durable materials to withstand the environment.

Longevity

Tank comes with industry standard 10-year warranty.

INSTALLATION

- Operates on a standard 120V electrical circuit.
- Modular components fit through standard doorways.
- Flexible configuration, tank and heat pump can be installed in most places with project specific plumbing.
- Use the Control Dashboard to set the tank target temperature and monitor real-time system data.

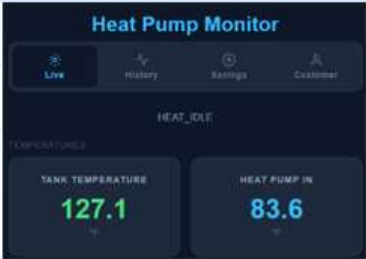


MATERIALS & CONSTRUCTION

- **Structure:** Engineered foam insulation — base, walls, and lid for superior thermal retention
- **Outer Hoop:** Thermoplastic polyolefin — durable, weather-resistant
- **Liner:** Polyvinyl chloride — long-term, corrosion-free reliability
- **Heat Exchanger:** Stainless steel — maximum surface area for rapid heat transfer
- **Plumbing:** Non-corrosive materials throughout, engineered for lasting performance

Cutaway view: The 3D rendering shows a submerged heat exchanger within a thermal storage tank. The coiled heat exchanger is a light orange color. The lid of the tank has four plumbing connection points. Inside of the tank, the heat exchanger is connected to two of the plumbing fittings, while the other two fittings are attached to pipes, one pipe extends to near the bottom of the tank while the other is closer to the top of the tank. Outside of the tank, the two heat exchanger fittings will attach to the domestic hot water line, where water will flow into the heat exchanger cold, gather the stored thermal energy, and return as hot water ready for use. The remaining fittings are connected to the heat pump where the heat pump draws transfer fluid from the bottom of the tank, heats it, and returns it near the top.

SYSTEM COMPONENTS & TECHNICAL SPECIFICATIONS

80-Gallon Thermal Storage Tank		
Capacity	80 gallons	
Dimensions	30" Dia. x 60" H	
Weight	63 lbs. (Empty), ~730 lbs. (Full)	
Nominal Operating Temp. DHW	135°F	
Max Working Fluid Temp.	200°F	
Thermal Storage Capacity	12.0 kWh @ 35° C delta	
Temp. Loss per 24hr	7-8° F	
Heat Exchanger		
Material	Corrugated stainless-steel	
Design	Immersed closed-loop system	
Plumbing Connection	1" NPT	
Heat Pump		
Dimensions	24" L x 24" H x 12.5" W	
Power Supply	120 VAC, 60Hz, 1Ph	
Amperage	12 A	
Plumbing Connection	3/4" Hose Barb	
Compressor	Inverter / Variable Speed	
Refrigerant Type	R32 (Factory Charged)	
Control Dashboard		
Live System Data	Program and View the System in Real Time	
History	View Historical System Usage	
Savings	Estimated Savings From Your System	
Updates and Alerts	System Alerts and Reminders	