

High-Efficiency Heat Pump Water Heaters

Standard electric water heaters account for nearly 20% of the energy used by an average home — more than a refrigerator, dishwasher, clothes washer and dryer combined.

However, an energy-efficient option exists. Heat pump water heaters, also known as hybrid water heaters, use heat pump technology to transfer heat from the surrounding air to water in the tank. This uses as little as one-third of the energy consumed by standard electric water heaters, which generate heat to produce hot water.

Efficiency isn't the only thing heat pump water heaters have going for them. They are also capable of providing more hot water per hour than similarly sized standard electric water heaters, and they come with 10-year warranties. Based on average home use, the increased efficiency can save you up to \$3,600 on your utility bills over the heat pump water heater's lifetime, compared to a conventional electric tank unit.

Types of heat pump water heaters include:

- Integrated, standalone units that work well in unconditioned spaces and can be fitted with intake and/or exhaust ducts for installation in conditioned living spaces.
- Split systems with a heat pump compressor that is separate from the tank to provide flexibility in installation locations.

Cost, Payback and Incentives

The average cost for a 50-gallon heat pump water heater is about \$1,200, and \$2,000–\$4,000 including installation. Pricing is affected by factors including tank size and any accommodations that must be made for the location of the installation.

You can save money by installing your own heat pump water heater. See the Hot Water Solutions DIY Guide to learn more.

The incremental price difference, additional cost compared to a standard electric tank water heater, is about \$850. The simple payback period for heat pump water heaters is typically 2 to 6 years.

An incentive of up to \$600 may be available. Check with your local utility for offers.

Typical Cost (with installation)	Payback Period	Utility Incentives
\$2,000–\$4,000	2 to 6 years	Up to \$600

Customer Benefits

- Reduces water-heating energy consumption and operating costs by up to 66% compared to standard electric water heaters.
- When properly sized, delivers more hot water than a standard electric resistance tank.
- Can be installed with little-to-no plumbing work needed.
- Offers a minimum 10-year manufacturer warranty on tank and parts.
- Many models offer leak detection and Wi-Fi connectivity.

Recommended For

- Homes with electric water heating, particularly with water heaters 10 years or older.
- Installations in unconditioned areas, such as garages or basements.