

STATE PREMIER® HYBRID ELECTRIC HEAT PUMP WATER HEATERS

MORE EFFICIENCY. MORE SAVINGS.

**WITH UP TO 2.75 ENERGY FACTOR (EF), THEY USE LESS THAN HALF
THE ELECTRICITY OF STANDARD ELECTRIC WATER HEATERS**



SOLID.STATE.



A NEW ERA IN ELECTRIC WATER HEATING.

For years, there have been few high efficiency options for homeowners that have an electric water heater. That's because there were few technological advances in electric water heating.

But all that has changed now, with the State Premier® Hybrid Electric Heat Pump Water Heater. Our advanced design integrates heat pump technology into a product that is more than twice as efficient as a standard electric water heater. It's the most versatile and energy-efficient option for homeowners looking for cost savings and performance.

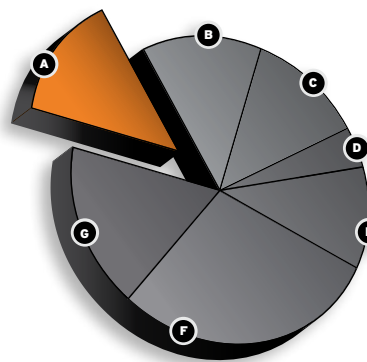
Premier Hybrid Electric Heat Pump Water Heaters offer up to a 2.75 Energy Factor (EF). The design features an integrated heat pump with high efficiency compressor and external coil heat exchanger, with back-up electric elements. This combination provides greater energy efficiency and more energy savings, while providing multiple operating modes for greater flexibility.

Designed to cut energy costs by more than half.

On average, water heating accounts for 14% of household energy use, so savings in water heating costs make a big difference in a household budget.

That's why State developed its Premier Hybrid Electric Heat Pump Water Heaters. They use significantly less energy to meet household water heating needs. It's a product that plumbers, wholesalers and homeowners can appreciate.

In fact, the State Premier Hybrid Electric Heat Pump Water Heater can save a typical household up to \$393 per year on their electricity bills compared to a standard electric water heater. That's a savings of more than \$3,930 over a 10-year period. With a payback period of three years or less, the State Premier Hybrid Electric Heat Pump Water Heaters are a great solution for an energy-efficient upgrade.

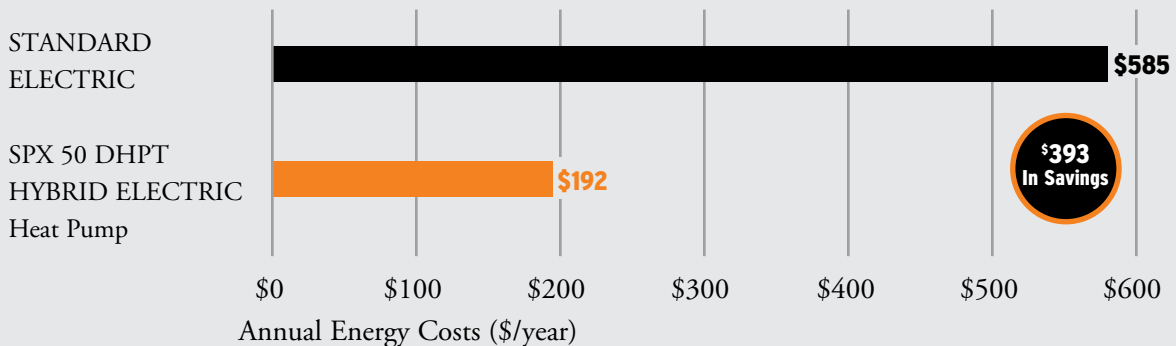


- A. Water Heating: 14%**
- B. Appliances: 13%** (Includes refrigerator, dishwasher, clothes dryer)
- C. Lighting: 12%**
- D. Electronics: 4%** (Includes computer and monitor, tv and DVD)
- E. Other: 11%** (Includes external power adapters, set-top boxes, ceiling fans, vent fans, ovens, home audio, small appliances and other household products.)
- F. Heating: 29%**
- G. Cooling: 17%**

Low annual operating cost means \$393 annual savings, or \$3,930 over a 10-year period, compared to conventional electric water heater.

Source: Typical House memo, Lawrence Berkeley National Laboratory, 2009 and Typical_house_2009_Reference.xls spreadsheet.

Compare the energy costs with State Premier Hybrid Electric SPX 50 DHPT Heat Pump.



Based upon DOE test procedure and comparison of 50-gallon standard electric tank water heater.



Cutaway of EPX models

HOW IT WORKS.

In "Efficiency" mode, State Premier Hybrid Electric Heat Pump Water Heaters operate automatically to heat water in the following manner:

1. A fan brings air through the air filter.
2. Heat in the air is absorbed by the refrigerant inside the evaporator coil.
3. The refrigerant is pumped through a compressor, which raises the temperature.
4. Hot refrigerant is circulated through the coil and transfers heat to the water.
5. The coil and storage tank are surrounded by "Environmentally-Friendly" Non-CFC foam insulation to reduce standby heat loss.





THE BEAUTY OF HAVING OPTIONS

- If you have minimal space constraints, the 80 or 60 gallon model is your best option. The higher capacity models offer improved performance, designed to optimize the impact of the efficient heat pump technology. More storage capacity lets you store more of the hot water created by the heat pump. This capacity also enables the unit to operate in the maximum efficiency mode more often than competitive models.
- If you are looking for heat pump energy efficiency, but have space limitations, the 50 gallon was designed just for you. It offers the highest Energy Factor available in a heat pump (when in Hybrid mode) at 2.75 EF, and it can save homeowners up to \$350 a year in operating costs.
- No matter what your needs, you get the high efficiency you expect from the State Premier Hybrid Electric Heat Pump, almost like it was designed with you in mind.

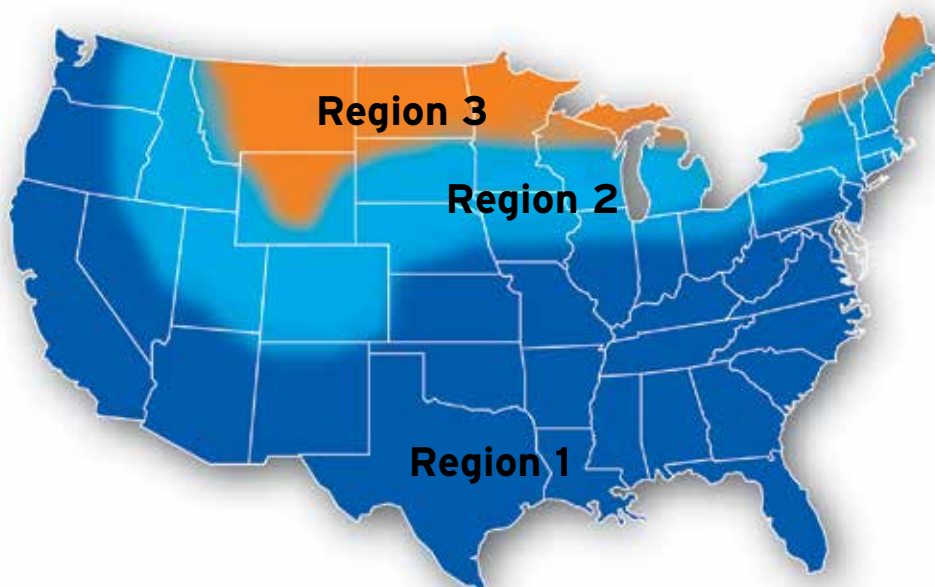
Large capacity allows use across all geographic zones.

State Premier Hybrid Electric Heat Pump Water Heaters can be effectively used in all areas of the U.S. Based on ambient conditions, hybrid mode allows both of the heating components – heat pump and traditional heating elements – to operate in order to provide optimal performance.



Savings Are Greater Where Electricity Rates Are Highest

The greatest savings and quickest payback can often be in regions where the average temperatures are colder but electricity rates are higher. Operating 5 months out of the year in the heat pump mode where electricity rates are twice as high as the national average may yield more savings than operating 10 months in the heat pump mode where electricity rates may be lower.



Region 1: Heat pump will be used most of the year **Region 2:** Majority heat pump operation
Region 3: Combination heat pump and electric heating elements



ADVANCED ELECTRONIC CONTROL.

Homeowners may choose from four operating modes: Efficiency, Hybrid, Electric and Vacation.



SPX 50 control



EPX 80 control

SPX 50 USER INTERFACE

- The SPX 50 DHPT is easy for homeowners to use, and customized to meet their unique needs, with 3 operating modes (Efficiency, Hybrid, Electric), a programmable Vacation mode, and diagnostic reporting through the eye-level user interface panel.
- The SPX 50 DHPT has a communications port built into the user interface, which will enable connectivity to home management applications for control via smart phone/tablet/PC, as well as to connect to money saving utility demand response solutions.

EPX 80 USER INTERFACE

- Large LCD with three line display and touch pad buttons, provides simplified control of temperature and mode, and communicates current status and diagnostics in plain English.
- Safety lock feature prevents unwanted access.
- Status icons clearly indicate operating mode.



State Premier Hybrid Electric Heat Pump Water Heater

MODEL NUMBER	GALLON CAPACITY	ENERGY FACTOR BY MODE			FIRST HOUR RATING BY MODE			HEIGHT (INCHES)	DIAMETER (INCHES)	SHIPPING WEIGHT (LBS)
		EFFICIENCY	HYBRID	ELECTRIC	EFFICIENCY	HYBRID	ELECTRIC			
EPX 80 DHPT	80	2.30	2.33	.85	70	84	76	81 ½	24 ½	340
SPX 50 DHPT	50	2.78	2.75	.89	42	67	59	63	22	196

Choose from three operational modes and a convenient Vacation Mode

Choose the right efficiency setting, based on climate, demand and installation.

Efficiency Mode – The high efficiency setting utilizes only the heat pump to extract warmth from the surrounding air and transfer it to the water. This mode provides a high Energy Factor (EF).

Hybrid Mode – When hot water demand is at its peak, this setting utilizes both the heat pump and conventional electric elements to provide the needed amount of hot water. This mode will provide a highly efficient EF.

Electric Mode – In electric mode, the unit operates as a conventional electric model utilizing the elements only.

Vacation Mode – One touch operation maintains tank temperatures of 60°F (15.6°C) during vacation or extended absence to reduce operating costs and provide freeze protection. SPX 50 DHPT is Vacation programmable up to 99 days.

ENERGY STAR® QUALIFIED.

All State Premier Hybrid Electric Heat Pump Water Heaters meet ENERGY STAR® qualifications.

