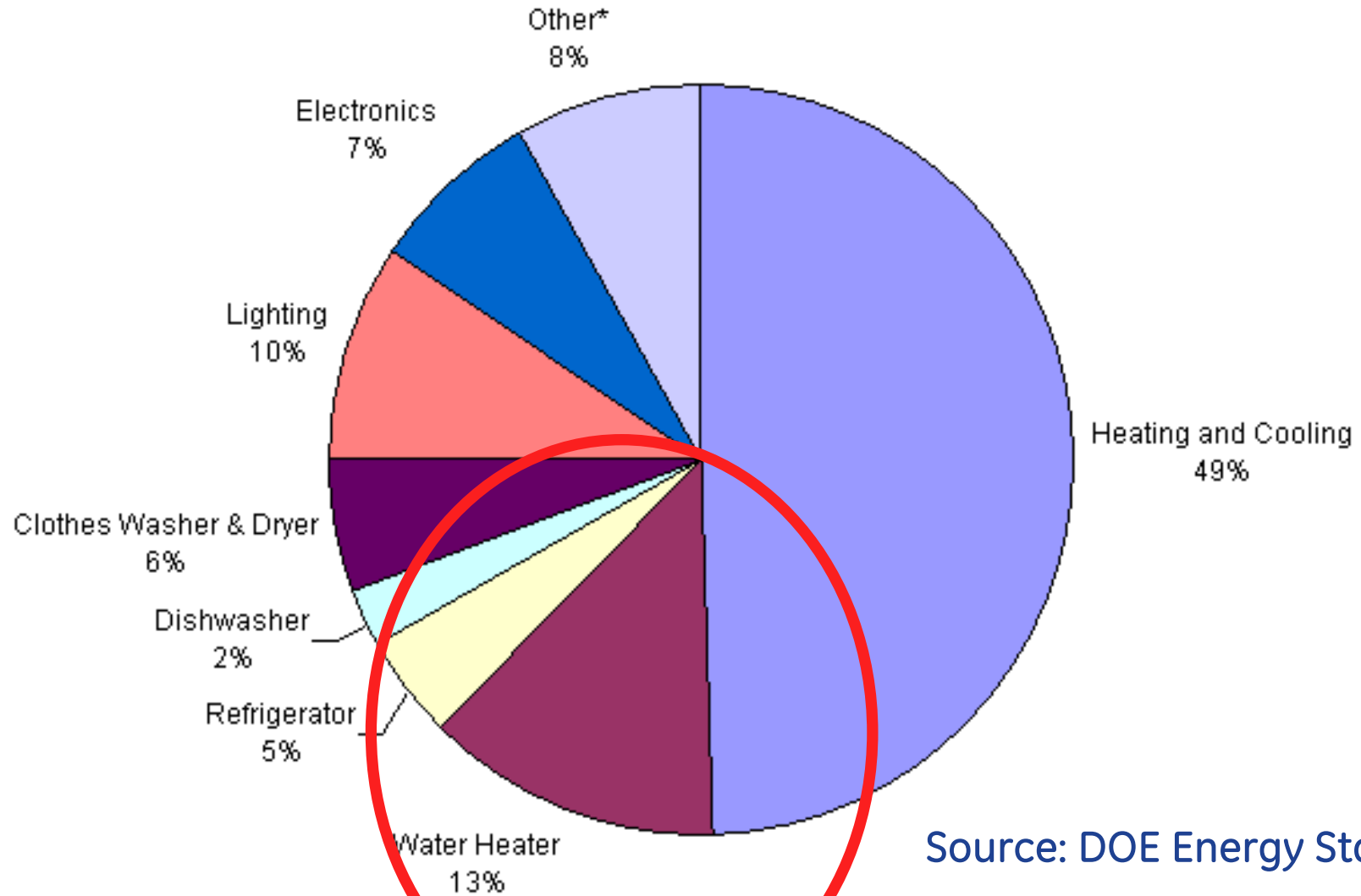


Edison
would be pleased



Home Energy Usage – Water Heating 2nd Highest Single Energy User

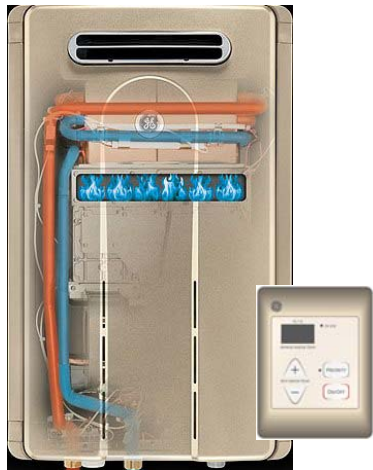


Source: DOE Energy Star

Two GE Energy Star Options



Indoor Style Shown



Outdoor Style Shown

Gas Tankless

Gas

EF=.82

Up to 35% more efficient

Continuous Hot Water

7.5/9.4 GPM

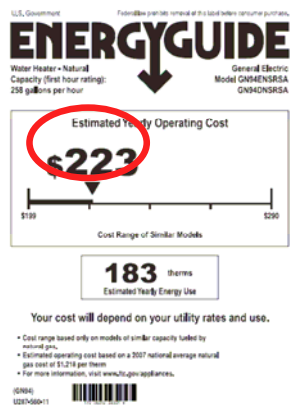
Direct Vent

NG/LP 120v

Indoor/Outdoor

Electronic Controls

30% Federal Tax Credit



GeoSpring Hybrid

Electric

EF= 2.35

Up to 62% more efficient

50 Gallon Tank Capacity

63 Gallon First Hour Rating

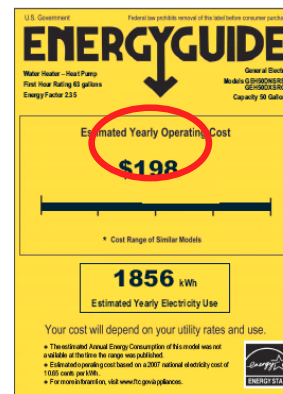
No Venting

208/240v 30 Amp Breaker

Basement/Garage/Closet

Electronic Controls

30% Federal Tax Credit



What makes a water heater Energy Star?



Energy Star

- 2009 – First year for Energy Star ratings on water heaters as a category

Type of Heating Source

- Must be a Heat Pump water heater

Energy Factor Rating

- Must be 2.0 or higher (**GE = 2.35**) Current electric water heaters are only .90-.95

First Hour Delivery

- Must deliver 50 GPH (GE=63)

Warranty

- Must have 6 year minimum parts warranty (**GE = 10 years**)

GeoSpring Hybrid Water Heater



Protection and Savings

- Save up to 62% on water heating cost
- EF **2.35** compared to .90-.93
- **Demand Response** enabled
- Save about **\$320** per year (2.6 occupants)

Convenience

- Use existing water/electrical connections
- Same foot print of existing 50 gal heater
- 50 gallon capacity, 63 gallon First Hour Rating

Incentive

- Federal tax incentive – 30% up to \$1500
- State & Utility Rebates
- Energy Star 2009 – 1st Qualified

Quality of Life

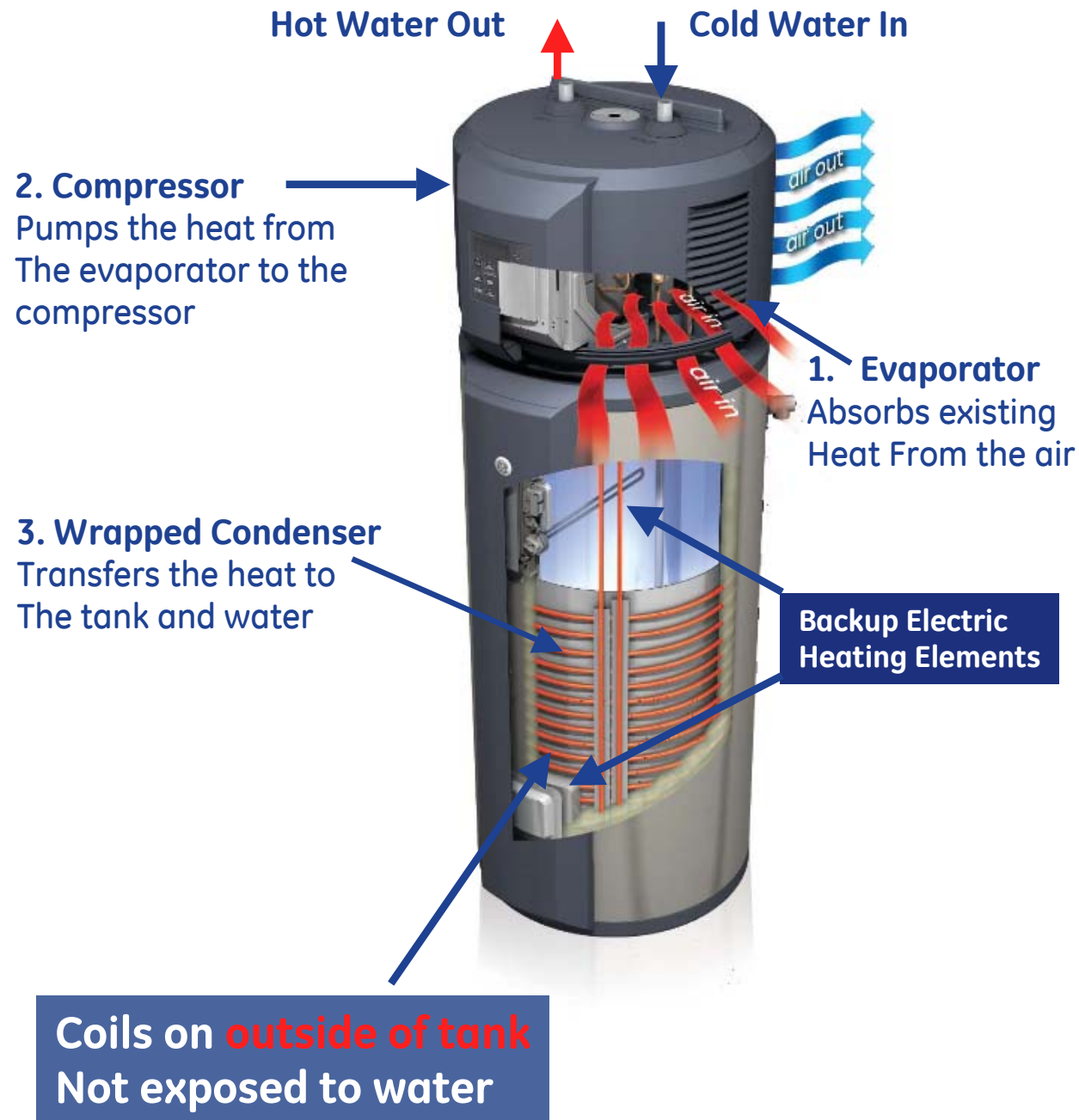
- Electronic control to monitor system
- Product of Ecomagination

*10.6 cents per kwh.

How it works



Play



4 Operating Modes + Vacation



- **Hybrid Mode** – Default mode. Operates as a heat pump using 550 watts, can cycle on upper heating element (4500 w) for fast recovery of 10 gallons, then lower for full tank.
- **High Demand** – Operates first as a heat pump (550 w), brings on upper heating element for fast recovery of 10 gallons. Can cycle on lower heating element for full tank recovery based on water used.
- **E-heat Mode** – Operates using only the heat pump (550 w).
- **Standard Electric** – Can operate as a standard electric water heater cycling upper and lower 4500 watt heating elements.
- **Vacation Mode** – Lowers tank temperature to 50 degrees for 3-90 days. Returns to set temp on last day.
- **Stop Cold Air** – Allows home owner to stop using the heat pump up to 99 days during months where the cool air exhaust may be offensive. System automatically reverts back to previous mode of operation upon completion.

1st Demand Response Enabled



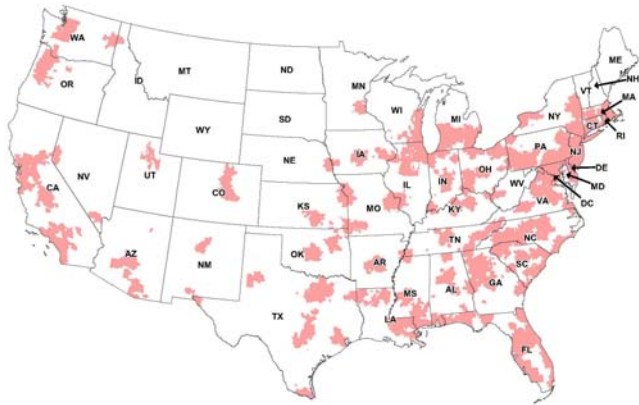
4 - Signals

- **E-heat Mode** – Operates using only the heat pump (550 w), maintains set tank temp.
- **E-Heat Mode** – Drops tank temp to 110 degrees
- **E-Heat Mode** – Drops tank temp to 100 degrees
- **Return** – Goes back to customer setting

Post-sale Service Capabilities

GE Factory Service

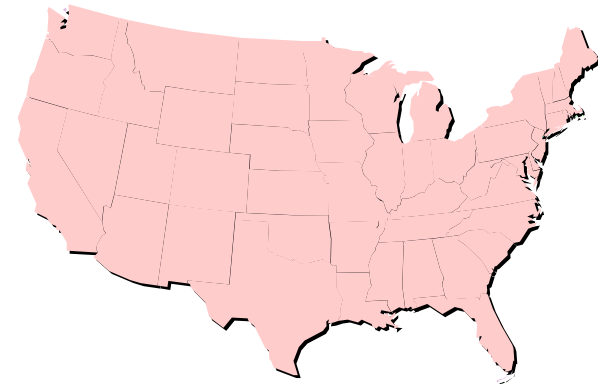
80+% population covered



- 1,200 Technicians – GE Employees
- 1.9 million calls annually
- Work exclusively on GE brand
- 2 dispatch centers (Atlanta & Phoenix)

GE Customer Care Network

99.8% population covered



- 25,000 Technicians – Independent companies
- 500,000 GE Major Appliance calls annually
- Work on multiple brands and multiple products, including appliances, consumer electronics, water products & central air conditioning

Best in class service network ... Provides critical support to consumers, plumbers, builders & the GE Brand

New Technology, New Opportunity!



- **High Performing**
- **EF .95**
- **Uses 4,622 kwh per year**
- **6 years parts warranty**
- **Life time tank – non transferable**
- **10 year tank - Lease**
- **Not Demand Response enabled**

\$700-\$800

GE Hybrid

- **EF 2.35**
- **Uses 1,856 kwh per year.**
- **10 year all parts warranty- Transferable**
- **Demand Response enabled**
- **Avoid up to 62% Co2 emissions**
- **Energy Star**
- **30% tax credit**
- **Electronic Thermostat**
- **Vacation Mode**
- **Same footprint**
- **Same Electric hook up**



\$1599-\$1699



Screen shot from Rheem web site

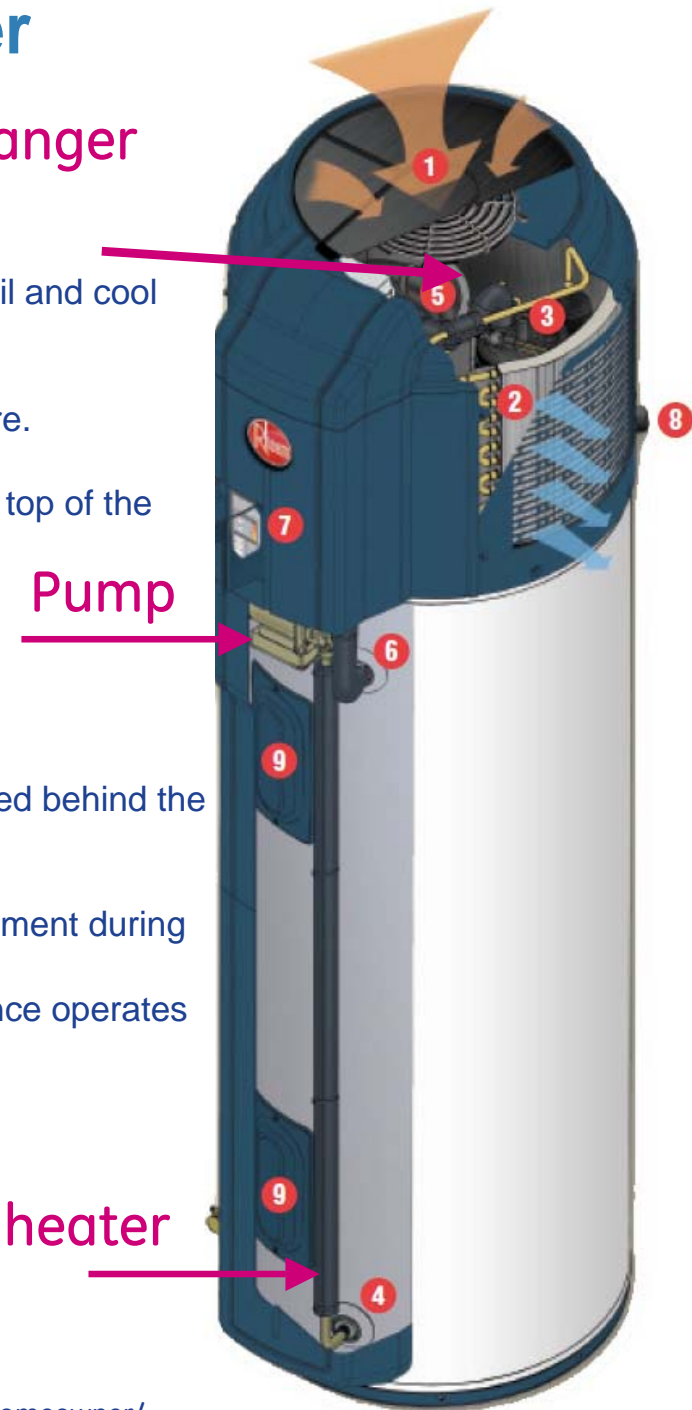
How the Rheem Heat Pump Water Heater Works

1. A fan pulls air through the top air filter.
2. Heat in the air is absorbed by eco-friendly refrigerant inside the evaporator coil and cool (dehumidified) air is exhausted.
3. Refrigerant is pumped through a compressor, which increases the temperature.
4. Simultaneously the cooler water from the bottom of the tank is pumped to the top of the appliance, where it circulates through a patented condenser coil.
5. Hot refrigerant transfers its heat to the water inside the condenser coil.
6. Heated water is returned back to the top of the tank.
7. All functions are controlled simultaneously by an advanced circuit board located behind the user touch pad.
 - In "Normal" mode, the heat pump can run in tandem with an electric element during periods of high demand.
 - In "Electric Heat Only" mode, the heat pump is disabled and the appliance operates like a standard electric water heater with two elements.
8. Condensate drain connection.
9. Backup electric heating elements.

External heat exchanger touches water

Pump

Water pumped outside heater



Screen shot from Rheem web site

ENERGY
SAVER

The most energy efficient setting is Energy Saver mode, it works by extracting warmth from the surrounding air, concentrating the heat, and delivering it to the water.

This mode provides an **industry leading 2.0 energy factor (EF)** and a first hour delivery comparable to a standard 50 gallon electric model.

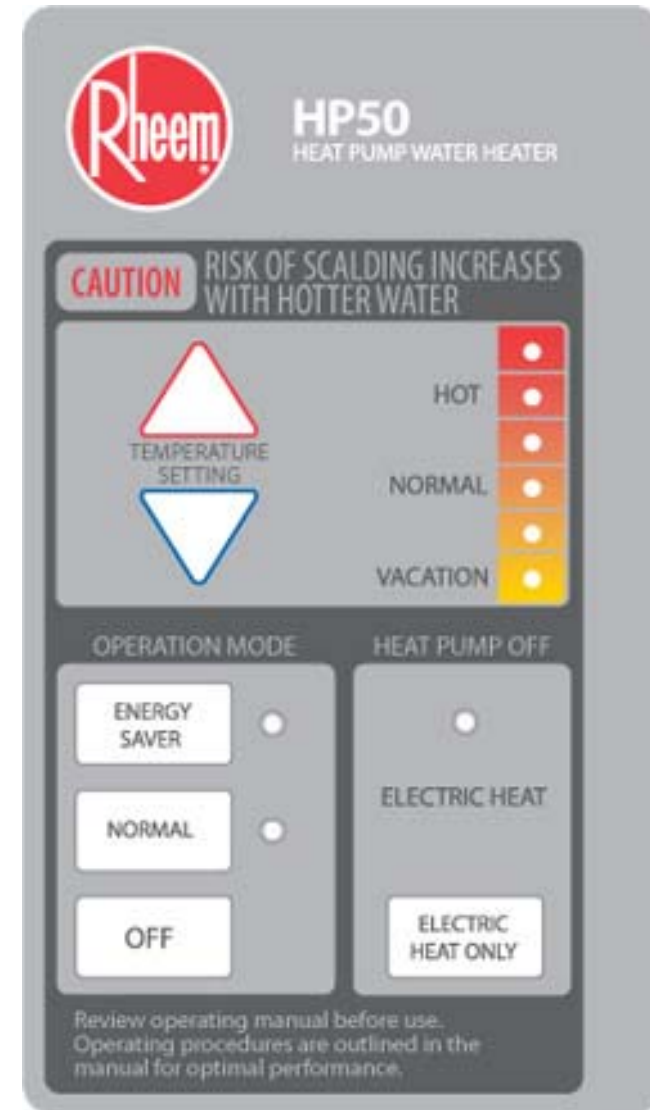
NORMAL

When hot water demands are high, use the Normal setting. In this mode both the heat pump and electric element will operate as needed.

The **Normal mode** will provide a remarkable **1.5 EF** and a first hour delivery in excess of a standard 65 gallon electric model.

ELECTRIC
HEAT ONLY

A temporary Electric Heat Only setting is available to ensure hot water availability without operating the heat pump. The HP-50 will revert back to Energy Saver operation after two weeks, if not reset by the user.





Heat Pump Water Heater Comparison



GE



2.35 in Hybrid Mode



\$320/year



Limited 1-yr labor, 10-yr parts



4 modes + Vacation Mode



Same connections/size as std water htr



\$1,599-\$1,699*



Yes



Yes



50 Gallons



Deluxe membrane w/ digital readout



Digital 100-140F, 1 degree increments



External condenser coils



Yes



Brand

Energy Efficiency

Savings

Warranty

Operating Modes/Flexibility

Ease of Installation

MSRP

Demand Response Ready

Energy Star Rated

Capacity

Control Panel

Temperature Setting

Reliability

Removable Anode Rod

Rheem

1.5 in Normal, 2.0 in HP only

\$286/year



Limited 1-yr labor, 10-yr parts

3 modes

Side connections, 75" tall



\$1,599* (estimate)

No



Yes



50 Gallons

Basic touchpad

Vacation-Normal-Hot

Internal coils, Recirc pump

No



Heat Pump Water Heater Comparison



AirTap™

GE	Brand	Air Tap
Demand Response Enabled	Demand Response	Not
2.35 in Hybrid Mode	Energy Efficiency/Savings	2.11 – only operates heat pump
Limited 1-yr labor, 10-yr parts	Warranty	Limited 1-yr labor, 3-yr parts
4 modes + Vacation Mode	Operating Modes/Flexibility	1
Same top connections as std water htr	Ease of Installation	2 people, needs 115v outlet
\$1,599-\$1,699	MSRP	\$748 plus installation, plus tank
Coils external to tank, no recirc pump	Reliability	Must push coil into tank
Yes	Energy Star Rated	No – does not meet standard
50 Gallons	Capacity	Must use existing tank
Deluxe membrane w/ digital readout	Control Panel	Knob
Digital 100-140F, 1 degree increments	Temperature Setting	Max 130
45-120F	Heat Pump Operating Range	35-?

We want to partner with you!