The Rheem Difference

Rheem is the only company who can help a homeowner control 65% of their home’s energy usage.

Water Heating is The 2nd Highest Energy User In The House

Professional Prestige® ProTerra Hybrid Electric with LeakGuard™
At Rheem, we believe in going beyond the expected and striving for what’s possible. It’s how we’ve run our business and designed our air and water products for nearly 100 years—becoming a trusted leader for our customers and partners across the globe.

Early 1900 Ruud Water Heater
Continuing to Lead...

Introducing...

Rheem® is proud to continue paving the way for Hybrid Water Heaters by introducing the industry’s most efficient, advanced, and widest line of solutions available!

• **Smart**
• **Sustainable**
• **Savings**
The ProTerra Advantage

- LeakGuard Auto Shutoff
- LeakSense Leak Detection
- Integrated EcoNet WiFi
- Remote Control
- Compressor & Element Health Indicator
- Hot Water Availability
• Integrated leak detection cable behind lower cavity cover

• Absorbent leak detection wick around base of unit provides 360° protection

*Integrated leak detection available on Proterra with LeakGuard models only
LeakGuard™

- Ball Valve Fitting
- Connector Cable
- Quick Release Pin
- Manual Override
- Shutoff Valve Position Indicator
How Does It Work

15 Second Detection Time
HOW TO CONNECT
1) **Press** and hold the “WiFi” button for 5 seconds to put heater into pairing mode  
   *during this time, the blue indicator light will flash*

2) **Once** in pairing mode, completed the WiFi setup on mobile device. Once connected, the WiFi light on the unit will turn solid blue
EcoNet App 2.0 Provisioning

- Download EcoNet app and create profile
- Add Product
- Add Location
- Ensure Product is Ready to Connect
- Connect to EcoNet network (broadcasted by product)
EcoNet App 2.0 Provisioning

• Tap Available Networks to find home network
• Connect to home network
• Wait for product to establish connect
• “Internet Connected” will be displayed upon successful connection
• Once connected, product home screen will be displayed
The ProTerra Advantage

- **Highest Efficiency**
- **Carbon Footprint Reduction**
- **Energy Usage Tracking**
- **Energy Star® Rated**
The ProTerra Advantage – Carbon Footprint Reduction

WHAT DOES THAT MEAN???

Standard Electric 50 gallon water heater has a total carbon emission of 3486 CO₂ lbs per year

202 trees needed to offset the carbon emissions*

Reduces carbon footprint with a 75% reduction in energy use

ProTerra 50 gallon hybrid water heater total carbon emissions: 846 CO₂ lbs per year

*(Std Electric total carbon emissions (3486)) – ProTerra 50 gallon carbon emissions (846) / CO2 stored from tree (13)) = trees needed

(3486 – 846)/13
Carbon Emissions From The Production of Electricity

Power station generating electricity = Carbon emissions

CO₂
Value Proposition With Solar

2.5 - 300w pv Panels

9.8 - 300w pv Panels
The ProTerra Advantage

- Save Money & Energy
- Energy Saving Schedule
- Built-in Demand Response
- Vacation/Away Mode
Over 75% Reduction In Energy Usage

867 kWh per Year

$104

First Hour Rating
Very Small Low Medium (0.9 gallons) High

3,531 kWh per Year

$424

First Hour Rating
Very Small Low Medium (0.9 gallons) High

Energy usage cost will depend on your utility rates and use.

Cost range based on models fueled by heat pump with tank with a medium GPM (12–19 gallons).

Estimated energy cost based on a national average household with a cost of 12 cents per kWh.

Estimated yearly energy use: 867 kWh

Estimated yearly energy use: 3,531 kWh
80gal HPWH vs Propane

**Estimated Yearly Energy Cost**

- **$149**

**First Hour Rating**

- **Medium**
- **High 88.8 gallons**

- Your cost will depend on your utility rates and use.
- Cost range based on models fueled by electric heat pump with tank with a high first hour rating (Greater than 75 gallons).
- Estimated energy cost based on a national average heat pump with tank cost of 0.12 cents per kWh.
- Estimated yearly energy use: 1341 kWh.

---

**Estimated Yearly Energy Cost**

- **$732**

**First Hour Rating**

- **High 88.8 gallons**

- Your cost will depend on your utility rates and use.
- Cost range based on models fueled by propane gas with a high first hour rating (Greater than 75 gallons).
- Estimated energy cost based on a national average propane gas cost of $2.41 per gallon.
- Estimated yearly energy use: 364 gallons.
## Payback Story

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hybrid HPWH</td>
<td>$2500</td>
</tr>
<tr>
<td>Less Standard WH</td>
<td>$1500</td>
</tr>
<tr>
<td><strong>Cost Difference:</strong></td>
<td><strong>$1000</strong></td>
</tr>
<tr>
<td>Instant rebate</td>
<td>$ -500</td>
</tr>
<tr>
<td>Federal Tax Credit</td>
<td>$ -300</td>
</tr>
<tr>
<td>Upgrade price difference</td>
<td>$ 200</td>
</tr>
</tbody>
</table>

**$300 Energy Savings per year**

Pays for itself in less than **8 Months**!

**$2,800 Lifetime Savings!**
Sound Familiar?
Key Components

• The ONLY 40 gallon Hybrid Electric Water Heater on the market
• Ensure a replacement for any existing standard tank
• Zero clearance requirement for installation in tight spaces*
Key Components

- All new re-designed display
- Easy to use controls for easy adjustment
- All new Test Mode for easy diagnostics
MODEL LINE UP / SPECS
What’s New With ProTerra

**HYBRID BUILDER**
- NEW! 40, 50, 65, 80 Gallon Capacities
- Remote Access (Integrated WiFi)
- Zero Clearance Requirement
- Widest Range of Ambient Temp
- Less Than Two-year Payback
- Meets NEEA Tier 3
- Leak Detection Ready

**PROTERRA**
In addition to the Builder model features, this model includes...
- Up to 4.00 UEF
- Demand Response Ready (CTA 2045)
- Quietest (<50 dBA)
- Automatic Maintenance Alert
- $4,800 Energy Cost Savings
- Leak Detection and Shutoff Valve Ready
- Meets NEEA Tier 4

**PROTERRA W/LEAKGUARD**
In addition to the Plus model features, this model includes...
- Auto Water Shut-off Valve (LeakGuard)
- Integrated 360° Water Leak Detection (LeakSense)
LeakSense and LeakGuard Add-on

**Hybrid Builder Model**
Leak detection ready!

Easily upgrade the Builder model with LeakSense Kit

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP19134</td>
<td>Leak Sensor</td>
</tr>
</tbody>
</table>

**ProTerra Model**
Leak detection and shutoff valve ready!

Easily upgrade the Plus model with LeakSense / LeakGuard Kit

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP21111</td>
<td>Leak Sensor and Shutoff Valve</td>
</tr>
</tbody>
</table>
## Specifications

<table>
<thead>
<tr>
<th>Capacity</th>
<th>40 Gallon</th>
<th>50 Gallon</th>
<th>65 Gallon</th>
<th>80 Gallon</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BREAKER SIZE</strong></td>
<td>30A</td>
<td>15A</td>
<td>30A</td>
<td>15A</td>
</tr>
<tr>
<td><strong>UEF</strong></td>
<td>3.75</td>
<td>3.45</td>
<td>3.75</td>
<td>3.75</td>
</tr>
<tr>
<td><strong>RECOVERY</strong></td>
<td>26</td>
<td>16</td>
<td>27</td>
<td>16</td>
</tr>
<tr>
<td><strong>FIRST HOUR DELIV</strong></td>
<td>60</td>
<td>46</td>
<td>67</td>
<td>54</td>
</tr>
<tr>
<td><strong>HEIGHT</strong></td>
<td>63”</td>
<td>62”</td>
<td>65”</td>
<td>75”</td>
</tr>
<tr>
<td><strong>DIAMETER</strong></td>
<td>20 1/4”</td>
<td>22 1/4”</td>
<td>24 1/4”</td>
<td>24 1/4”</td>
</tr>
<tr>
<td><strong>COMPRESSOR BTU</strong></td>
<td>4200</td>
<td>4200</td>
<td>4200</td>
<td>4200</td>
</tr>
<tr>
<td><strong>WEIGHT</strong></td>
<td>177 lbs</td>
<td>193 lbs</td>
<td>262 lbs</td>
<td>281 lbs</td>
</tr>
<tr>
<td><strong>VOLTAGE</strong></td>
<td>240V</td>
<td>240V</td>
<td>240V</td>
<td>240V</td>
</tr>
<tr>
<td><strong>UPPER ELEMENT</strong></td>
<td>4500w</td>
<td>2250W</td>
<td>4500W</td>
<td>2250W</td>
</tr>
<tr>
<td><strong>LOWER ELEMENT</strong></td>
<td>4500W</td>
<td>2250W</td>
<td>4500W</td>
<td>2250W</td>
</tr>
</tbody>
</table>
## Hybrid Builder Model Line Up

<table>
<thead>
<tr>
<th>Builder Models</th>
<th>Rheem®</th>
<th>Ruud®</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>30 Amp</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40 Gallon</td>
<td>PRO H40 T2 RH310BM</td>
<td>PRO H40 T2 RU310BM</td>
</tr>
<tr>
<td>50 Gallon</td>
<td>PRO H50 T2 RH310BM</td>
<td>PRO H50 T2 RU310BM</td>
</tr>
<tr>
<td>65 Gallon</td>
<td>PRO H65 T2 RH310BM</td>
<td>PRO H65 T2 RU310BM</td>
</tr>
<tr>
<td>80 Gallon</td>
<td>PRO H80 T2 RH310BM</td>
<td>PRO H80 T2 RU310BM</td>
</tr>
</tbody>
</table>
Modes Of Operation

**ENERGY SAVER** (default mode)
- A recovery using the heat pump and upper element. Primary recovery with Heat Pump (up to 1,700W equivalent) and element when needed (4,500W). In high output situations, heater is producing the equivalent of up to 6,200W

**HEAT PUMP**
- Delivers up to 1,700W to the water at standard ambient conditions
- Operating temperature of 37° - 145°

**HIGH DEMAND**
- Upper/lower element along w/heat pump simultaneously heats the water. Up to 6,200W of recovery. Elements in this mode activate quicker

**ELECTRIC**
- Either element is used to heat the water

**VACATION**
- Tank temperature will be maintained at 65° for 1-28 days or held indefinitely when “HOLD” feature is used
PHYSICAL INSTALLATION
Ducting

Maximum Duct Lengths

<table>
<thead>
<tr>
<th>Duct Type / Diameter</th>
<th>8”</th>
<th>7”</th>
<th>6”</th>
<th>5”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rigid</td>
<td>340’</td>
<td>160’</td>
<td>65’</td>
<td>17’</td>
</tr>
<tr>
<td>Flexible</td>
<td>125’</td>
<td>65’</td>
<td>25’</td>
<td>--</td>
</tr>
</tbody>
</table>
Option 1:

Room size: Larger than 700 ft³ (e.g. 7' x 10' x 10').
Requirements: No additional ventilation needed.

Option 2:

Room: Small Closet
Requirements: * Air gap under door equal to 18 in² (0.75” clearance).
* Louver must be located the same height on door as the air exhaust on heater.
* Heater air exhaust must be positioned towards louver within one foot of door.

Option 3:

Room size: Smaller than 700 ft³ (e.g. 7' x 10' x 10').
Requirements: Full louvered door OR two louvers top and bottom. See below.
Accessory Kits
The Rheem Hybrid Wins:
- Highest Efficiency
- Quietest
- Zero Clearance
- Connectivity
- Leak Detection/Prevention
- Recovery
- 10 year Warranty

SMART
SUSTAINABLE
SAVINGS

Kevin Clark
Region Sales Manager-Utilities & RNC
Kevin.Clark@Rheem.com
702-218-0194