ENGINEERED TO BE THE BEST
Attention to Every Detail Satisfies Every Need!

Adding a high-end pool or spa reflects a desire for the good life. It’s an investment that enhances lifestyle – an oasis of relaxation and recreation, accessible any time, right outside the door.

Today, pool and spa builders must promise fast heat-up and comfortable water temperature, available quickly and efficiently. The master builder’s pool heater checklist also includes...

- Superior quality for trouble-free performance, backed by service-friendly design
- Attention to details for fast, easy installation to reduce labor and material costs
- Installation flexibility to work seamlessly with the aesthetics of the new pool or spa

Lochinvar® is the most innovative manufacturer of water heaters and heating boilers, serving the extraordinary demands of commercial buildings throughout the world. Our engineering excellence and commitment to understanding customer needs has produced EnergyRite®, the industry’s most advanced pool and spa heater, for homeowners who want the best of everything.

Hot Performance, Cool for the Environment!

EnergyRite heats up fast, saves money and helps conserve our natural resources with Low-NOx emissions that meet or exceed the most stringent “green” standards, anywhere in the country!

Heat up faster!

Five EnergyRite models offer power to guarantee speed-heating for any size pool or spa...from 150,000 Btu/hr to an industry-maximum 400,000 Btu/hr. And Lochinvar’s engineering delivers the highest thermal efficiency in its class.

It’s a combination that provides the industry’s fastest heat-up time, and uses less energy so homeowners save money every time they heat their pool or spa!

Adding a high-end pool or spa reflects a desire for the good life. It’s an investment that enhances lifestyle – an oasis of relaxation and recreation, accessible any time, right outside the door.

Today, pool and spa builders must promise fast heat-up and comfortable water temperature, available quickly and efficiently. The master builder’s pool heater checklist also includes...

- Superior quality for trouble-free performance, backed by service-friendly design
- Attention to details for fast, easy installation to reduce labor and material costs
- Installation flexibility to work seamlessly with the aesthetics of the new pool or spa

Lochinvar® is the most innovative manufacturer of water heaters and heating boilers, serving the extraordinary demands of commercial buildings throughout the world. Our engineering excellence and commitment to understanding customer needs has produced EnergyRite®, the industry’s most advanced pool and spa heater, for homeowners who want the best of everything.

Hot Performance, Cool for the Environment!

EnergyRite heats up fast, saves money and helps conserve our natural resources with Low-NOx emissions that meet or exceed the most stringent “green” standards, anywhere in the country!

Heat up faster!

Five EnergyRite models offer power to guarantee speed-heating for any size pool or spa...from 150,000 Btu/hr to an industry-maximum 400,000 Btu/hr. And Lochinvar’s engineering delivers the highest thermal efficiency in its class.

It’s a combination that provides the industry’s fastest heat-up time, and uses less energy so homeowners save money every time they heat their pool or spa!
Dive into EnergyRite Quality

Lochinvar’s time-proven commitment to advanced water heating technology is reflected in every detail and every component of EnergyRite. It’s a standard no other pool and spa heater can match, backed by a 3-year limited warranty on the heat exchanger and a 2-year limited warranty on all parts!

Service-Friendly Control System

- Fingertip setup, temperature adjustment and troubleshooting
- Separate control capability for pool and spa
- 2-line, 16-character display in words instead of confusing codes
- Equipped for third-party remote operation

Commercial-grade heat exchanger

- Highly efficient copper-finned tube design, time-proven in Lochinvar commercial water heaters and boilers*
- Advanced heat exchanger design with no O-rings, virtually eliminates leaks and failures
- Polymer headers, ideal for pool and spa heaters – ASME certified cast iron headers optional with slip-fit or threaded connections
*Cupro-nickel heat exchanger available

Advanced combustion system

- Direct-Spark ignition for superior reliability and efficiency
- High-efficiency stainless steel burners

Built-in floor shield

- Install on combustible flooring, no need to purchase a separate kit

Installer-friendly CPVC connections

- Adaptable for PVC pipe, using threaded or slip-fit connections

Fully sealed combustion chamber

- Windproof design for safe operation
- Keeps out wasps, spiders & pests
- Commercial-grade galvanized, painted steel jacket

Convenient, flexible terminal strip

- For easy wiring connections, including third-party remotes
- 240V or 120V electrical service
**Standard Features**
- 2-Line, 16-Character Digital Display
- Pool & Spa Temperature Control
- Password Lockable Control
- CPVC or PVC Ready
- 3rd-Party Remote Compatible
- Sealed Combustion Chamber
- Fan-Assisted Combustion
- Built-in Combustible Floor Shield
- Direct-Spark Ignition
- Stainless Steel Burners
- Loch-Heat Ceramic Tile
- 24V Terminal Strip
- Dual Voltage - 240V or 120V
- On/Off Switch
- Built-in Air & Water Pressure Switches
- Inlet & Outlet Temperature Sensors
- Automatic Reset High Limit Safety
- Polymer Header with Built-in Bypass
- Low-NOx Emissions Meet the Most Stringent Standards
- Flame View Port
- Outdoor Venting
- 3-Year Limited Warranty on Heat Exchanger
- 24V Terminal Strip
- Dual Voltage - 240V or 120V
- On/Off Switch
- Built-in Air & Water Pressure Switches
- Inlet & Outlet Temperature Sensors
- Automatic Reset High Limit Safety
- Polymer Header with Built-in Bypass
- Low-NOx Emissions Meet the Most Stringent Standards
- Flame View Port
- Outdoor Venting
- 3-Year Limited Warranty on Heat Exchanger

**Optional Equipment**
- ASME Construction
- ASME Pressure Relief Valve
- Cupro-Nickel Heat Exchanger
- Multi-Stack Frame
- Indoor Vent Kits
- Flow Switch

**Dimensions**

**Easy Ordering Key**
This key shows the model number of an EnergyRite Natural Gas Pool Heater with 300,000 Btu/hr input.

**Pool Sizing Guide**

- Determine your pool’s surface area in square feet.
- Determine the desired temperature rise by subtracting the average air temperature from the desired pool temperature.
- In the table below, locate the surface area equal to or just greater than your pool’s surface area at the desired temperature rise.
- Read to the left for the appropriate EnergyRite model number.

<table>
<thead>
<tr>
<th>Desired Temperature Rise</th>
<th>10°F</th>
<th>15°F</th>
<th>20°F</th>
<th>25°F</th>
<th>30°F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ERN152</td>
<td>1257</td>
<td>838</td>
<td>629</td>
<td>503</td>
<td>419</td>
</tr>
<tr>
<td>ERN202</td>
<td>1676</td>
<td>1117</td>
<td>838</td>
<td>670</td>
<td>559</td>
</tr>
<tr>
<td>ERN252</td>
<td>2095</td>
<td>1397</td>
<td>1048</td>
<td>838</td>
<td>698</td>
</tr>
<tr>
<td>ERN302</td>
<td>2514</td>
<td>1676</td>
<td>1257</td>
<td>1006</td>
<td>838</td>
</tr>
<tr>
<td>ERN402</td>
<td>3352</td>
<td>2235</td>
<td>1676</td>
<td>1341</td>
<td>1117</td>
</tr>
</tbody>
</table>

**NOTE:** Sizing is based on a 3-1/2 MPH average wind velocity for elevations up to 2,000 feet above sea level. For each 1,000 feet above 2,000 feet elevation, add 4% to the surface area of the pool.

**Spa & Hot Tub Sizing Guide**

- Determine your spa/hot tub’s capacity in U.S. gallons by multiplying the surface area (in square feet) by the average depth (in feet), then by a conversion factor of 7-1/2 (1 ft³ = 7-1/2 gallons).
- The table below lists the time required (in minutes) to raise the temperature of different size spa/hot tubs by 30°F.
- In the table below, locate the gallon capacity equal to or just greater than your spa/hot tub’s size in gallons.
- Select the desired heat-up time.
- Read to the left for the appropriate EnergyRite model number.

<table>
<thead>
<tr>
<th>Model</th>
<th>200</th>
<th>300</th>
<th>400</th>
<th>500</th>
<th>600</th>
<th>700</th>
<th>800</th>
<th>900</th>
<th>1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time (Minutes) required to raise temperature</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ERN152</td>
<td>23</td>
<td>34</td>
<td>45</td>
<td>57</td>
<td>68</td>
<td>80</td>
<td>91</td>
<td>102</td>
<td>114</td>
</tr>
<tr>
<td>ERN202</td>
<td>17</td>
<td>26</td>
<td>34</td>
<td>43</td>
<td>51</td>
<td>60</td>
<td>68</td>
<td>77</td>
<td>85</td>
</tr>
<tr>
<td>ERN252</td>
<td>14</td>
<td>20</td>
<td>27</td>
<td>34</td>
<td>41</td>
<td>48</td>
<td>55</td>
<td>61</td>
<td>68</td>
</tr>
<tr>
<td>ERN302</td>
<td>11</td>
<td>17</td>
<td>23</td>
<td>28</td>
<td>34</td>
<td>40</td>
<td>45</td>
<td>51</td>
<td>57</td>
</tr>
<tr>
<td>ERN402</td>
<td>9</td>
<td>13</td>
<td>17</td>
<td>21</td>
<td>26</td>
<td>30</td>
<td>34</td>
<td>38</td>
<td>43</td>
</tr>
</tbody>
</table>

**NOTE:** Spa/Tub Size in U.S. Gallons. Sizing is based on a 30°F temperature rise. To adjust for other temperature rises, divide the time listed in the table by the temperature ratio. Example: for a 15°F temperature rise, divide by 2 (30/2=15).

**Model Number**

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Btu/hr Input</th>
<th>B</th>
<th>D</th>
<th>Dimensions</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>Air Intake</th>
<th>Vent Size</th>
<th>E-Rite/Powered Sidewall Vent</th>
<th>Shipping Weight (lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERN152</td>
<td>150,000</td>
<td>23”</td>
<td>18”</td>
<td>10-1/4”</td>
<td>22”</td>
<td>6”</td>
<td>4”</td>
<td>5”</td>
<td>4”</td>
<td></td>
<td>183</td>
</tr>
<tr>
<td>ERN202</td>
<td>199,999</td>
<td>26-1/2”</td>
<td>20-3/4”</td>
<td>12”</td>
<td>22”</td>
<td>6”</td>
<td>4”</td>
<td>5”</td>
<td>4”</td>
<td></td>
<td>195</td>
</tr>
<tr>
<td>ERN252</td>
<td>250,000</td>
<td>30”</td>
<td>21-1/2”</td>
<td>13-3/4”</td>
<td>22”</td>
<td>6”</td>
<td>5”</td>
<td>6”</td>
<td>5”</td>
<td></td>
<td>217</td>
</tr>
<tr>
<td>ERN302</td>
<td>300,000</td>
<td>33-3/4”</td>
<td>25-3/4”</td>
<td>16-1/4”</td>
<td>21-1/2”</td>
<td>6-1/2”</td>
<td>5”</td>
<td>6”</td>
<td>5”</td>
<td></td>
<td>240</td>
</tr>
<tr>
<td>ERN402</td>
<td>399,999</td>
<td>41”</td>
<td>29-1/2”</td>
<td>20”</td>
<td>21-1/2”</td>
<td>7”</td>
<td>5”</td>
<td>6”</td>
<td>6”</td>
<td></td>
<td>269</td>
</tr>
</tbody>
</table>

**Note:** Change “N” to “L” for LP gas models. No deration for LP.
Water connections are 2” NPT on 4-1/2” centers. Gas connections are 3/4” NPT.