

Up to 96% Efficient

1. The quiet, brushless DC blower prepurges the submerged combustion chamber for 8 seconds and turns off.
2. The hot surface ignitor is energized and glows red hot.
3. The blower turns on, precisely mixing air and gas for combustion. The mixture is forced through the metal fiber burner and is ignited by the hot surface ignitor. A blue flame is evenly distributed across the entire burner, resulting in clean combustion with low nitrous oxide emissions.
4. The combustion chamber wall transfers high temperature heat from the flame to the water.
5. The blower pushes hot combustion gases through the spiral coil, which scrubs the remaining heat from the hot gases.
6. As combustion gas exits the bottom of the spiral coil, it is barely warm to the touch. Up to 96% of the heat from the flame is transferred to the water.
7. Combustion gases are vented through PVC, CPC or ABS plastic pipe.
8. Condensation formed by cooled combustion air is captured by a condensate trap and drained through a drain line.



The Quiet Way to Efficiently Heat Water

An ultra quiet radial blower is combined with a submerged burner for whisper quiet operation. Indicator lights illuminate when the power is on and when the ignitor and burner are operating.



An Excellent Choice for Hot Water

Polaris is ideal for large homes. For dishwashing, showers, baths, clothes washing, or hot tubs, Polaris is an excellent choice. Polaris models heat up to 255 GPH at a 90°F temperature rise, compared to 41 GPH for standard gas water heaters.



Polaris Combines Water Heating with Space Heating



Forced Air Hydronic Heat

Polaris can be used to combine an air handler for comfortable forced air hydronic space heating with potable hot water. Hot water is circulated through a coil in the air handler. Air from the home is warmed as it is blown across the coil. Warmed air is returned to the home through air ducts. With up to 199,000 BTUs, Polaris can heat most homes, large or small.

Radiant Hydronic Heat

Polaris works great for homeowners who prefer radiant hydronic heat. With radiant floor hydronic systems, potable hot water is circulated through tubes under the floor. The floor absorbs heat from the tubes and radiates it into the room. With radiant baseboard heat, potable hot water is circulated through finned tube baseboards. Heat rises from the baseboard heaters, warming the home. All water components must be approved for use with potable water.



