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## Hydra Smart Residential Tankless Water Heater Specification Sheet

### *Model: RT-150 / RT-199*

The RT- Tankless Water Heater manufactured by HTP, Inc., offers a modulating input from to Btu/Hr. The water heater shall operate on either Natural or LP Gas.

The water heater shall have a working pressure rating of a maximum of 150 psi. The water heater shall be ETL listed. The unit shall also be listed to NSF 372 for low lead content.

The water heater primary and secondary heat exchangers shall be constructed of 304 Stainless Steel and brazed in a controlled oven to assure the quality of the brazed joints. The combined heat capacity of the heat exchangers shall not exceed 2 gallons of water content. The water heater shall be built and tested in accordance with the harmonized ANSI standards for US and Canada. The heat exchanger assembly shall carry a twelve (12) year residential and five (5) year commercial warranty against leaks.

The premix combustion system shall be equipped with an AGM valve to regulate air flow and ensure accurate and precise combustion. The negative pressure gas valve operates at very low and high pressures with a range of 3.5" to 14" water column. The water heater will be equipped with an observation port to view the combustion off the burner head. The burner shall down fire and be constructed of ceramic metal fiber allowing unit to achieve 10 to 1 turndown.

The water heater shall have an integrated control system that utilizes an algorithm to fully adjust the firing rate. The water heater will control water temperature and flow rate with an electronic flow meter and mixing valve. The water heater can be programmed to supply water temperature up to 140°F.

The water heater shall be equipped with an LCD display which will allow the installer to set the water outlet temperature. This display also monitors many functions of the heater (Fan Speed - Supply and Return Temperature - High Limit Temperature – Flue Temperature).

Each water heater is equipped with a built-in condensate trap with discharge line for condensate disposal. The water heater has a sealed combustion system and can be vented with ULC-S636 PP, PVC, CPVC, or Stainless Steel vent materials. The water heater's total combined equivalent length, including fittings allowance for both intake and exhaust, shall not exceed 100 feet in 3 inch pipe. The vent connections shall be located on the top of the heater. All units ship with a 6 inch length of CPVC pipe which must be used before transitioning to PVC pipe.

**Direct Vent Horizontal Venting** shall be done as a balanced system only, thus requiring both intake and exhaust to terminate on the same side of the building.

**Vertical Venting** shall be done either as a balanced or unbalanced system. An unbalanced system shall ONLY be allowed when the exhaust is installed vertically and the intake horizontally. Both exhaust and intake must remain within the water heater's combined equivalent length. (Refer to water heater's installation manual venting section for additional venting requirements.)

**CAUTION: Foam core pipe is NOT an approved material for either intake or exhaust piping.** Refer to water heater installation manual venting section for additional venting requirements.

The water heater shall be in compliance with the NOx emissions limit set forth in SCAQMD Rule 1146.2. The manufacturer shall verify proper operation of the burner, the combustion and control systems, as well as all related safety functions, to ensure the water heater will operate based on its designed parameters before shipping. Complete operating and installation instructions shall be furnished with every heater as packaged by the manufacturer for shipping.

The appliance shall operate at high elevations without additional parts. However, adjustments to the combustion system may be required at any elevation. See installation manual for combustion system setting details.

Maximum unit dimensions shall be: Depth            inches, Width            inches and Height            inches. Maximum unit Weight shall be            pounds.

**NOTE:** HTP reserves the right to make product changes or updates without notice and will not be held liable for typographical errors in literature.