



Advanced Heating  
& Hot Water Systems

# High Efficiency Hydra Smart Residential



## Condensing Gas Tankless Water Heater

10 to 1 turndown ratio

Durable high grade stainless  
steel heat exchanger

Endless hot water, advanced  
temperature control

Advanced modulating  
water heater with  
up to **.96 UEF**

Available in  
LP and natural gas

Eco-friendly and low  
NOx combustion system



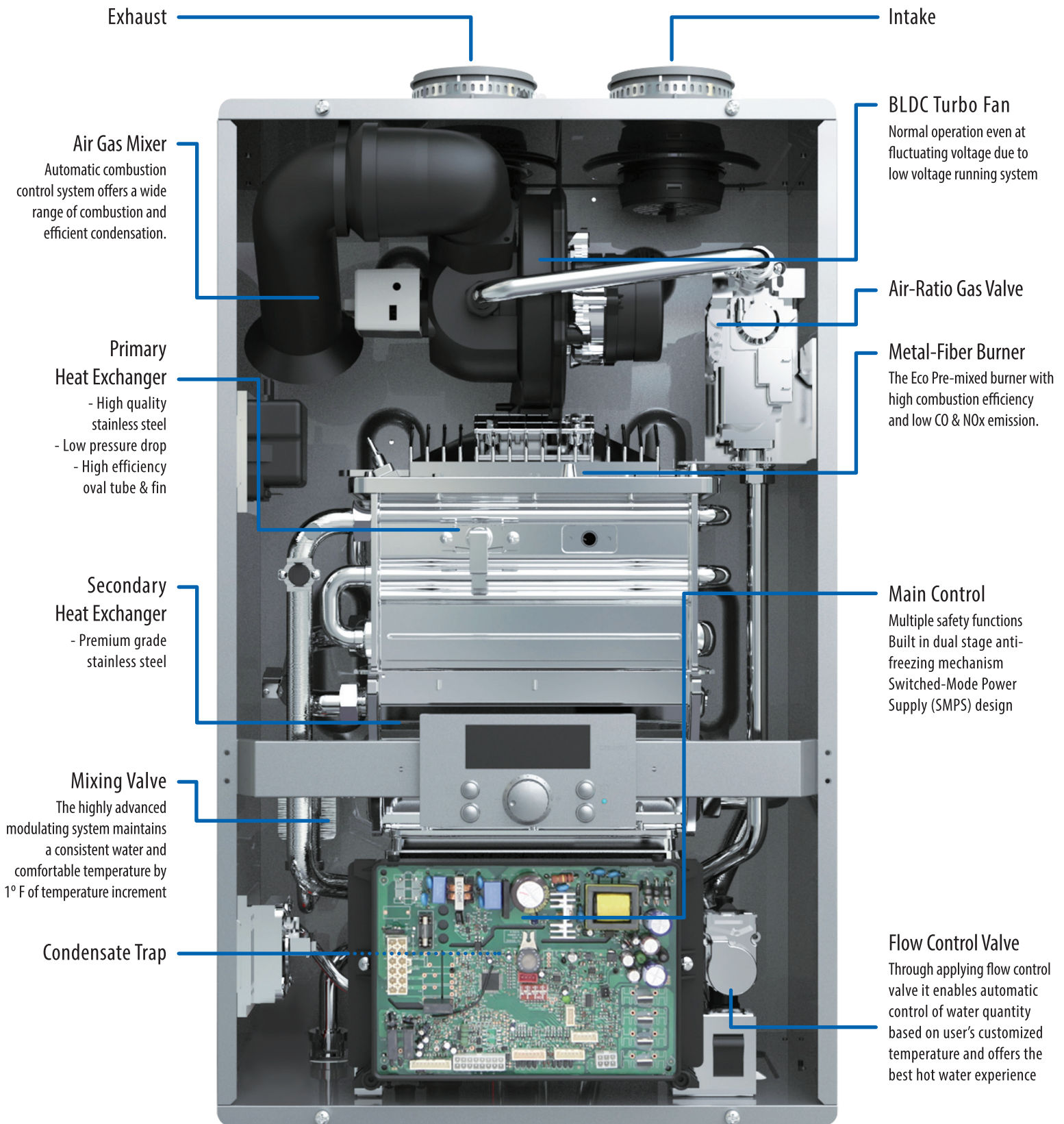
STAINLESS STEEL CONDENSING  
TANKLESS WATER HEATER



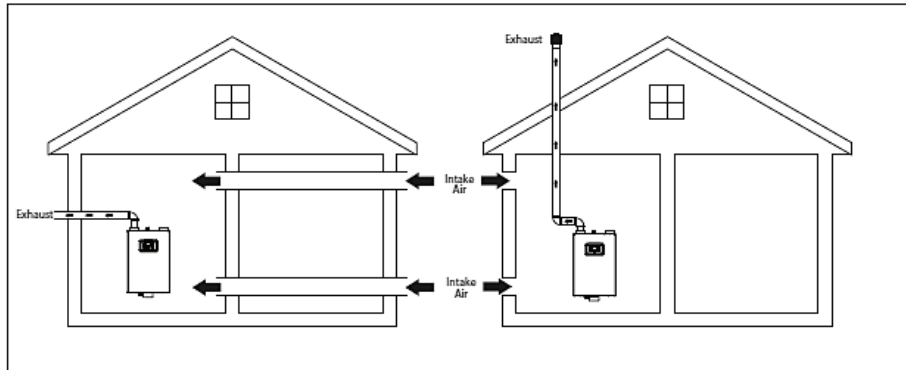
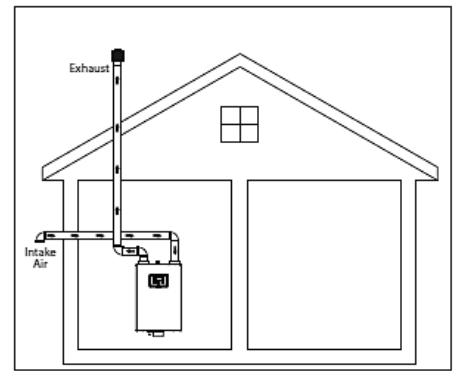
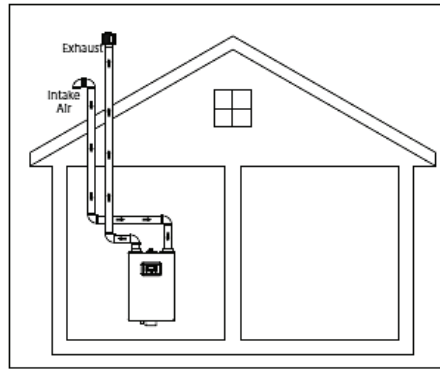
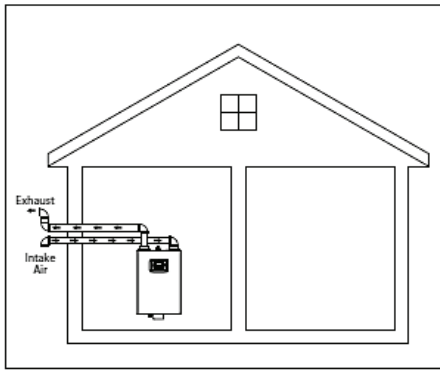
[www.htproducts.com](http://www.htproducts.com)

# Hydra Smart

## A CLOSER LOOK AT THE RT-199



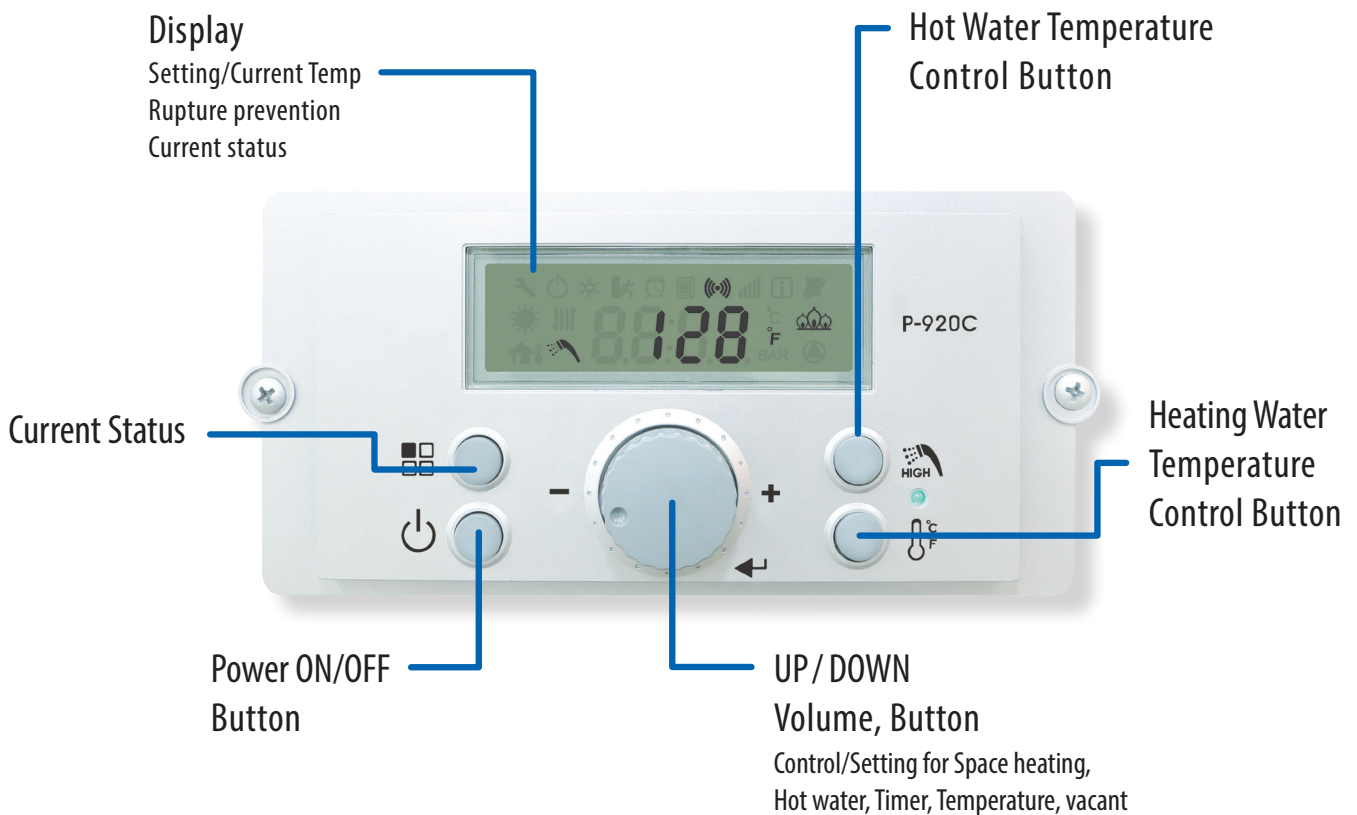
# VENT TERMINATION



# MULTIFUNCTION CONTROL PANEL

## Customized Temperature Control

Advanced user friendly technology of FLOW CONTROL, FLOWSENSOR and heat capacity control makes DHW even more comfortable by maintaining constant temperature during usage

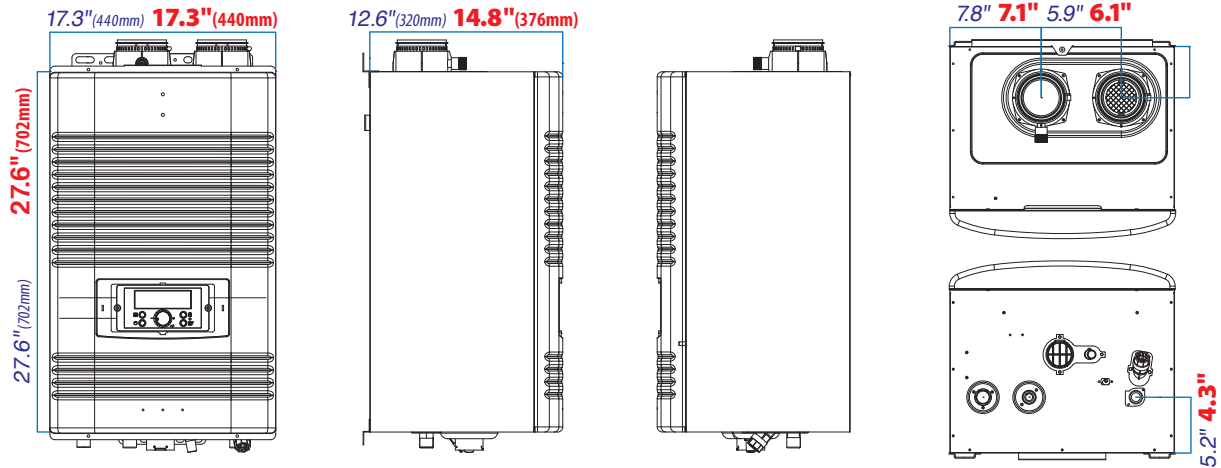


# SPECIFICATIONS

12 Year Residential & 5 Year Commercial Limited Warranty

**Dimensions for the RT-199 (Red)**

Dimensions for the RT-150 (Blue)



\*Must be ordered as LP units or Natural Gas units, NOT field convertible

| MODEL  |                               | *RT-150   | *RT-199                       |
|--|-------------------------------|---|-------------------------------|
| Gas Input Rate                                   | Max                           | 150,000 Btuh  | 199,000 Btuh                  |
|  | Min                           | 15,000 Btuh   | 19,900 Btuh                   |
| UEF (Uniform Energy Factor) / EF (Energy Factor) |                               | .93 UEF / .95 EF  | .96 UEF / .98 EF              |
| Recovery Efficiency                              |                               | 94%   | 99%                           |
| Max GPM Rating Bin / Max GPM                     |                               | High / 4.5  | High / 5.9                    |
| Hot Water Capacity                               | 35°F Rise                     | 8.1 Gal. Per Minute   | 11.0 Gal. Per Minute          |
|  | 45°F Rise                     | 6.3 Gal. Per Minute   | 8.5 Gal. Per Minute           |
|  | 77°F Rise                     | 3.7 Gal. Per Minute   | 5.0 Gal. Per Minute           |
| Installation                                     |                               | Indoor, Wall Hung, Fully Condensing   |                               |
| Flue System                                      |                               | Sealed Combustion Direct Vent, Power Vent   |                               |
| Vent   |                               | 2" (50 ft), 3" (100ft) Schedule 40 PVC, CPVC, PP  |                               |
| Orifice Size                                     | NG (Orifice/Needle)           | .303" (7.7 mm)  | .374" (9.5 mm)                |
|  | LP (Orifice/Needle)           | Consult Factory   |                               |
| Gas Supply Pressure                              | NG                            | 3.5" WC ~ 14" WC  |                               |
|  | LP                            | 3.5" WC ~ 14" WC  |                               |
| Manifold Pressure                                | Min (3")                      | NG: -0.07" WC / LP: -0.07" WC   | NG: -0.10" WC / LP: -0.05" WC |
|  | Max (3")                      | NG: -0.366" WC / LP: -0.366" WC   | NG: -0.11" WC / LP: -0.06" WC |
| Power Supply                                     | Main Supply                   | 120V 60Hz   |                               |
|  | Max power Consumption         | 125W  | 135W                          |
| Ignition System                                  |                               | Direct Electric Ignition / Automatic Flame Sensing  |                               |
| Burner System                                    |                               | Single Orifice Premixed Fuel Modulation Metal Fiber Infrared  |                               |
| Gas Valve System                                 |                               | Air Ratio Gas Valve   |                               |
| Minimum Flow Rate                                |                               | 0.5 GPM   |                               |
| Internal Pipe Material                           |                               | Stainless Steel   |                               |
| Dimensions (W x H x D)                           |                               | 17.3" X 27.6" X 12.6"   | 17.3" X 27.6" X 14.8"         |
| Weight   |                               | 64 lbs  | 88 lbs                        |
| Heat Exchanger Water Capacity                    |                               | Under 2 Gallons   |                               |
| Control Panel / Main Controller                  |                               | 7850P-057 / 7850P-125   | 7850P-057 / 7850P-058         |
| Water Pressure                                   | Max                           | 150 psi   |                               |
|  | Min                           | 15 psi  |                               |
| Connection Sizes                                 | (Cold/Hot) Water inlet/Outlet | 3/4" NPT  |                               |
|  | Gas Inlet                     | 3/4" NPT  |                               |
|  | Condensate                    | 1/2" NPT  |                               |
| Materials  | Cabinet                       | Cold Rolled Carbon Steel  |                               |
|  | Heat Exchanger                | Primary Heat Exchanger: Stainless Steel<br>Secondary Heat Exchanger: Stainless Steel  |                               |
| Safety Devices                                   |                               | Flame Rod, Burner Overheat Cut Off Device 302°F, Flue High Limit Switch 190°F, Water Temperature High Limit Switch 199°F, Freeze Protection Ceramic Heater (Turns on at 41°F, Turns off at 59°F), Water Leak Detect Sensor (RT-150) |                               |