

## VERTEX™ 94% THERMAL EFFICIENCY VERSATILE POWER VENT DESIGN

Today's homes demand more hot water than ever before, and the 94% efficient Vertex™ power vent gas water heater offers unprecedented levels of performance to meet the need. The 50-gallon Vertex delivers more hot water than a standard 75-gallon atmospheric gas water heater. In fact, the fully condensing Vertex design is so advanced, it can deliver "continuous hot water for shower after shower" at a constant flow of over 3 gallons per minute.\* Yet Vertex is easy to install, with height, diameter and installation requirements similar to standard power vent units.

### HELICAL INTERNAL HEAT EXCHANGER

- Spiral heat exchanger keeps hot combustion gases in the tank longer to lengthen the heat transfer cycle
- Positioned in the center of the tank for more even heat distribution
- Operates at 94% thermal efficiency, which saves money on operating costs compared to a standard 78% efficient gas water heater

### POWER VENT DESIGN

- Combined vertical and horizontal runs terminating through an outside wall. Vents using PVC, CPVC, or polypropylene pipe. Canadian installations require ULC S636 approved pipe for venting.
  - 2" pipe, vents up to 25 equivalent feet
  - 3" pipe, vents up to 65 equivalent feet
  - 4" pipe, vents up to 128 equivalent feet

### MODULAR BLOWER

- Equipped with 120 volt, 60 Hz electrical system (rating 5 amps or less), 6-foot cord with standard 3-prong connector
- 2" PVC pipe, elbows and condensate drain supplied to connect heat exchanger outlet to blower

### SIDE-MOUNTED HOT AND COLD RECIRCULATING TAPS

- Allows Vertex to be installed as part of combination space heating/water heating applications or any system requiring a recirculating hot water loop, including radiant floor heating

### TWO HEAVY-DUTY ANODE RODS

- Provide maximum protection against corrosion

### INTELLI-VENT™\*\* GAS CONTROL

- Equipped with a robust silicon nitride hot surface ignitor — no standing pilot
- Advanced electronics for more precise control of water temperature and easy to understand system diagnostics

### BLUE DIAMOND® GLASS COATING

### GREEN CHOICE® GAS BURNER

- Patented eco-friendly burner design reduces NOx emissions by up to 33% and complies with Low-NOx emission requirements of less than 40 ng/J.

### CSA CERTIFIED AND ASME RATED T&P RELIEF VALVE

### MAXIMUM HYDROSTATIC WORKING PRESSURE: 150 PSI

### CODE COMPLIANCE

- Meets UBC, CEC and ICC National Codes.
- Meets the thermal efficiency and standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/IES 90.1.

### DESIGN-CERTIFIED BY UNDERWRITERS LABORATORIES

- Certified at 300 psi test pressure and 150 psi working pressure. Listed according to ANSI Z21.10.3 - CSA 4.3 standards governing storage tank-type water heaters.

### 6-YEAR LIMITED TANK AND PARTS WARRANTY

- For complete information, consult written warranty or go to [hotwater.com](http://hotwater.com)

\* Continuous hot water based on 3.07 GPM continuous flow with a 65°F inlet water temperature, 110°F outlet temperature, and a unit installed per the manufacturer's instructions.

\*\*Intelli-Vent™ is a trademark of Emerson Electric Company

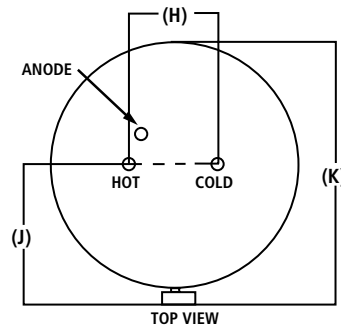
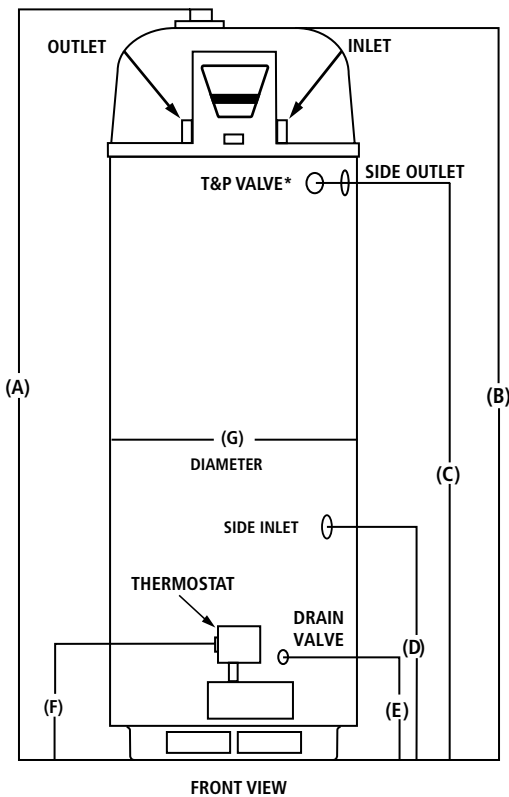


SERIES 120



Model Number	Nominal Capacity	Rated Storage Volume	First Hour Rating (Gallons)	UEF	Thermal Efficiency	Recovery @ 90°F Rise Gallon Per Hour	BTU Input Per Hour	Dimensions in Inches		Approx. Shipping Weight (lbs)
								Height (A)	Diameter (G)	
GPHE-50	50	48	124	0.88	94%	95	76,000	71 1/8	22	225

Available in natural gas only.  
 Top inlet and outlet connections: 3/4" male NPT.  
 Circulation loop connections: 3/4" female NPT.  
 Standard model certified for sea level to 5,300 ft. elevation. Order SMR K30 for elevations to 10,100 ft.  
 Optional Condensate Neutralizer Kit available (Part Number 100112380).



\*Install in accordance with local codes

For technical information call 800-527-1953. A. O. Smith Corporation reserves the right to make product changes or improvements without prior notice.