

# Light Duty Commercial Ultra Low NOx Power Direct Vent Gas Water Heater



Photo is of  
**UPDX-65S-55FR-3N**

## FEATURING:



**AIRI**



### The Light Duty UPDX Eco-Defender Safety System Models Feature:

- **Bradford White ICON System™**—Intelligent gas control with spark to pilot ignition system eliminates the constant burning pilot. This results in savings of pilot gas during stand by periods (120 V.A.C.).
  - **Enhanced Performance**—Proprietary algorithms provide enhanced First Hour Delivery ratings and tighter temperature differentials.
  - **Advanced Temperature Control System**—Microprocessor constantly monitors and controls burner operation to maintain consistent and accurate water temperature levels.
  - **Intelligent Diagnostics**—An exclusive green LED light prompts the installer during start-up and provides ten different diagnostic codes to assist in troubleshooting.
  - **Separate Immersed Thermowell**—High strength advanced polymer composite thermowell provides isolation between electric temperature sensor and surrounding water. No need to drain the tank when removing gas valve.
- **Ultra Low NOx Burner with Primary and Secondary Air Distribution Devices**—Ensures proper air to gas ratio for reduction of NOx generated by the combustion process.
- **Closed Combustion Venting System**—Power Direct Vent closed combustion system utilizes external air for combustion and exhausts directly to the outside through a separate two-pipe system. The air intake and exhaust vent are 3" connections. The equivalent feet of intake venting cannot be greater than the equivalent feet of exhaust venting.
- **Cast Aluminum Air Intake Boot**—A cast molded air intake boot design provides exceptional durability during installation and operation.
- **Flammable Vapor Sensor**—Electronic sensor prevents water heater operation if flammable vapors are detected.
- **Factory Installed Hydrojet® Total Performance System**—Cold water inlet sediment reducing device helps prevent sediment build up in tank. Increases first hour delivery of hot water while minimizing temperature build up in tank.
- **Vitraglas® Lining**—Bradford White tanks are lined with an exclusively engineered enamel formula that provides superior tank protection from the highly corrosive effects of hot water. This formula (Vitraglas®) is fused to the steel surface by firing at a temperature of over 1600°F (871°C).
- **More Precise Temperature Control**—With an adjustable temperature up to 180°F. (Not recommended for 180°F sanitization.)
- **Powerful Blower Motor**—Our design has higher torque for greater resistance to outside winds and the power to eliminate problems with difficult venting situations. This significantly quieter motor runs cooler for a considerably longer operational life.
- **Optional Concentric Vent Kit Termination**—3" termination fitting provides for only one exit opening through a wall or roof. (Subtract 10ft. for intake pipe and 10ft. for exhaust pipe when calculating total vent length.)
- **Horizontal and Vertical Venting**—With 3" or 4" PVC, ABS, or CPVC (Maximum equivalent vent length for each pipe on reverse side).
- **Side Connections**—3/4" NPT tapings allow easy connections for space heating applications (Potable water only).
- **2" Non-CFC Foam Insulation**—Covers the sides and top of tank, reducing the amount of heat loss. This results in less energy consumption, improved operation efficiencies and jacket rigidity.
- **Water Connections**—3/4" NPT factory installed true dielectric fittings extend water heater life and eases installation.
- **Factory Installed Heat Traps**—Design incorporates a flexible disk that reduces heat loss in piping and eliminates the potential for noise generation.
- **Protective Magnesium Anode Rod**—Provides added protection against corrosion for long trouble-free service.
- **Stainless Steel Flue Baffle**—Maximizes the amount of heat absorbed by the tank and reduces heat loss during standby periods.
- **Steel Tank**—Heavy gauge steel automatically formed, rolled and welded.
- **T&P Relief Valve**—Included.
- **Low Restriction Brass Drain Valve**—Durable tamper proof design..
- **Design Certified by CSA International (formerly AGA and CGA).**
- **Complies with the latest ultra-low NOx requirement (10 ng/J NOx limit).**

### 3 or 5-Year Limited Tank Warranties / 1-Year Limited Warranty on Component Parts.

For more information on warranty, please visit [www.bradfordwhite.com](http://www.bradfordwhite.com)

For products installed in USA, Canada and Puerto Rico. Some states do not allow limitations on warranties.

See complete copy of the warranty included with the heater.

MANUFACTURED UNDER ONE OR MORE OF THE FOLLOWING U.S. PATENTS: 5,682,666; 7,634,976; 5,660,165; 5,954,492; 6,056,542; 6,935,280; 5,372,185; 5,485,879; 5,574,822; 7,971,560; 7,992,526; 6,684,821; 6,442,178; 7,334,419; 7,866,168; 7,270,087; 7,007,748; 5,596,952; 6,142,216; 7,699,026; 5,341,770; 7,337,517; 7,665,211; 7,665,210; 7,063,132; 7,063,133; 7,559,293; 7,900,589; 5,943,984; 8,082,888; 5,988,117; 7,621,238; 7,650,859; 5,761,379; 7,409,925; 5,277,171; 8,146,772; 7,458,341; 2,262,174. OTHER U.S. AND FOREIGN PATENT APPLICATIONS PENDING. CURRENT CANADIAN PATENTS: 2,314,845; 2,504,824; 2,108,186; 2,143,031; 2,409,271; 2,548,958; 2,112,515; 2,476,685; 2,239,007; 2,092,105; 2,107,012. Defender Safety System®, Vitraglas® and Hydrojet® are registered trademarks of Bradford White® Corporation.

# Commercial Power Direct Vent Gas Water Heater

## Light Duty Energy Saver Models

NATURAL GAS

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed  
79% Recovery Efficiency

| Model Number      | Capacity  |           | Nat. BTU/Hr. Input | First Hour Rating** Gal. | Recovery at 100°F Rise* |               | A Floor to Exhaust Outlet      | B Jacket Dia. | C Vent Size | D Floor to T&P Conn.           | E Floor to Gas Conn.           | F Floor to Space Heating Return | G Floor to Space Heating Supply | H Floor to Air Intake          | J Floor to Water Conn.         | K Depth                        | L Ct. Line Distance From Intake to Exhaust | Approx. Shipping Weight |
|-------------------|-----------|-----------|--------------------|--------------------------|-------------------------|---------------|--------------------------------|---------------|-------------|--------------------------------|--------------------------------|---------------------------------|---------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------------------|-------------------------|
|                   | U.S. Gal. | Imp. Gal. |                    |                          | Nat. U.S. GPH           | Nat. Imp. GPH | in.                            | in.           | in.         | in.                            | in.                            | in.                             | in.                             | in.                            | in.                            | in.                            | in.                                        | lbs.                    |
| U-PDX-50S-50FR-3N | 48        | 40        | 50,000             | 92                       | 48                      | 40            | 68                             | 22            | 3           | 52 <sup>1</sup> / <sub>4</sub> | 13 <sup>5</sup> / <sub>8</sub> | 15 <sup>3</sup> / <sub>4</sub>  | 52 <sup>1</sup> / <sub>4</sub>  | 67                             | 59 <sup>3</sup> / <sub>4</sub> | 32                             | 9 <sup>1</sup> / <sub>4</sub>              | 303                     |
| U-PDX-65S-55FR-3N | 65        | 54        | 55,000             | 106                      | 53                      | 44            | 71 <sup>1</sup> / <sub>4</sub> | 24            | 3           | 55 <sup>5</sup> / <sub>8</sub> | 13 <sup>5</sup> / <sub>8</sub> | 15 <sup>3</sup> / <sub>4</sub>  | 55 <sup>5</sup> / <sub>8</sub>  | 69 <sup>1</sup> / <sub>2</sub> | 63                             | 34 <sup>1</sup> / <sub>8</sub> | 9 <sup>1</sup> / <sub>4</sub>              | 330                     |
| U-PDX-75S-55FR-3N | 75        | 62        | 55,000             | 122                      | 53                      | 44            | 71                             | 26            | 3           | 54 <sup>1</sup> / <sub>4</sub> | 16 <sup>1</sup> / <sub>4</sub> | 19                              | 54 <sup>1</sup> / <sub>4</sub>  | 69 <sup>3</sup> / <sub>8</sub> | 62 <sup>3</sup> / <sub>4</sub> | 36                             | 11 <sup>11</sup> / <sub>16</sub>           | 375                     |

| Model Number      | Capacity |  | Nat. kW Input | First Hour Rating** Liters | Recovery at 56°C Rise* |  | A Floor to Exhaust Outlet | B Jacket Dia. | C Vent Size | D Floor to T&P Conn. | E Floor to Gas Conn. | F Floor to Space Heating Return | G Floor to Space Heating Supply | H Floor to Air Intake | J Floor to Water Conn. | K Depth | L Ct. Line Distance From Intake to Exhaust | Approx. Shipping Weight |
|-------------------|----------|--|---------------|----------------------------|------------------------|--|---------------------------|---------------|-------------|----------------------|----------------------|---------------------------------|---------------------------------|-----------------------|------------------------|---------|--------------------------------------------|-------------------------|
|                   | Liters   |  |               |                            | Nat. Liters/Hour       |  | mm.                       | mm.           | mm.         | mm.                  | mm.                  | mm.                             | mm.                             | mm.                   | mm.                    | mm.     | mm.                                        | kg.                     |
| U-PDX-50S-50FR-3N | 182      |  | 14.7          | 348                        | 182                    |  | 1727                      | 559           | 76          | 1327                 | 346                  | 400                             | 1327                            | 1701                  | 1517                   | 812     | 235                                        | 137                     |
| U-PDX-65S-55FR-3N | 246      |  | 16.2          | 401                        | 201                    |  | 1809                      | 610           | 76          | 1489                 | 346                  | 400                             | 1489                            | 1765                  | 1600                   | 867     | 235                                        | 149                     |
| U-PDX-75S-55FR-3N | 284      |  | 16.2          | 462                        | 201                    |  | 1803                      | 660           | 76          | 1378                 | 413                  | 483                             | 1378                            | 1762                  | 1594                   | 914     | 297                                        | 170                     |

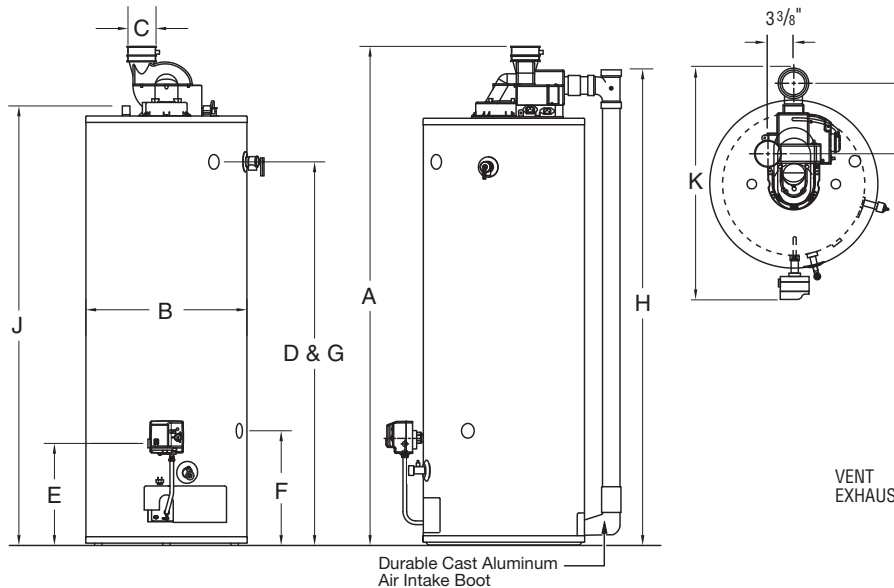
Available in Natural Gas only.

For 5 year model, change suffix "3" to "5".

\*Based on manufacturers rated recovery efficiency.

\*\*First Hour Rating is based on the latest AHRI Directory Listings.

110 V.A.C Required for Power Venting / 110 V.A.C., 60HZ, 3.1 Amperes.

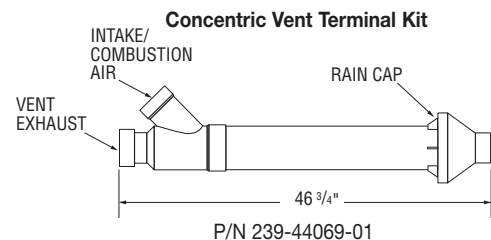


| 3" Vent Pipe         | PDX-50S                          | PDX-75S                 |
|----------------------|----------------------------------|-------------------------|
| Max. Intake Length   | 60 ft.                           | 50ft.                   |
| Max. Exhaust Length  | 60 ft.                           | 50ft.                   |
| Min. Vent Length     | 7 ft.                            | 7ft.                    |
| Number of 90° Elbows | 1 55 ft.<br>2 50 ft.<br>3 45 ft. | 45ft.<br>40ft.<br>35ft. |

| 4" Vent Pipe         | PDX-50S                          | PDX-75S                 |
|----------------------|----------------------------------|-------------------------|
| Max. Intake Length   | 100 ft.                          | 90ft.                   |
| Max. Exhaust Length  | 100 ft.                          | 90ft.                   |
| Min. Vent Length     | 7 ft.                            | 7ft.                    |
| Number of 90° Elbows | 1 95 ft.<br>2 90 ft.<br>3 85 ft. | 85ft.<br>80ft.<br>75ft. |

Subtract 5ft. for each additional 90° elbow.



### Meets NAECA Requirements

#### General

All gas water heaters are certified at 300 PSI test pressure (2068 kPa) and 150 PSI working pressure (1034 kPa). All water connections are 3/4" NPT (19mm) on 11" (203mm) centers. All gas connections are 1/2" (13mm).

All models design certified by CSA International (formerly AGA/CGA), to meet ANSI standard Z-21.10.1 and peak performance rated.

**Dimensions and specifications subject to change without notice in accordance with our policy of continuous product improvement.**

#### Suitable for Water (Potable) Heating and Space Heating.

Toxic chemicals, such as those used for boiler treatment, shall NEVER be introduced into this system. This unit may NEVER be connected to any existing heating system or component(s) previously used with a non-potable water heating appliance.



For U.S. and Canada field service, contact your professional installer or local Bradford White sales representative.

Sales 800-523-2931 • Fax 215-641-1670 / Technical Support 800-334-3393 • Fax 269-795-1089 • Warranty 800-531-2111 • Fax 269-795-1089

International: Telephone 215-641-9400 • Telefax 215-641-9750 / [www.bradfordwhite.com](http://www.bradfordwhite.com)

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## Built to be the Best™

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