

## Light-Duty Commercial Power Vent Gas Water Heater



Photo is of  
LG2PV50H653N

### FEATURING:

**BRADFORD WHITE**  
**ICON**  
System™



**DEFENDER**  
SAFETY SYSTEM™



### The TTW® 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 standby periods (120 VAC).
  - **Enhanced Performance**—Proprietary algorithms provide enhanced First Hour Rating and tighter temperature differential.
  - **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.
  - **Pilot On Indication**—Flashing green LED provides positive indication that pilot is on.
  - **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.
- **Power Vent Water Heater**—Designed for installations where atmospheric units cannot be used. Exhaust gases are vented under positive pressure directly out of the building through the roof or the wall.
- **Powerful Blower Motor**—Our significantly quiet design has greater resistance to outside winds and the power to vent in many difficult venting situations.
  - Ten Foot Power Cord—Included (120 VAC).
- **Horizontal and Vertical Venting**—PVC, ABS or CPVC (Maximum equivalent vent length on reverse side).
- **Advanced ScreenLok® Technology Flame Arrestor Design**—Flame arrestor is designed to prevent ignition of flammable vapor outside of the water heater (excluding LG1PV55H783N & LG2PV75H763N).
- **Flammable Vapor Sensor**—Electronic sensor prevents burner operation if flammable vapors are detected. The sensor will also prevent operation if there is ongoing flammable vapors burning inside the combustion chamber (excluding LG1PV55H783N & LG2PV75H763N).
- **Maintenance-Free**—No regular cleaning of air inlet openings or flame arrestor is required under normal conditions (excluding LG1PV55H783N & LG2PV75H763N).
- **Sight Window**—Offers a view into the combustion chamber to observe the operation of the pilot and burner.
- **Factory-installed Hydrojet® Total Performance System**—Sediment reducing device that also increases first hour rating of hot water while minimizing temperature build-up in tank.
- **Vitraglas® Lining**—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).
- **Insulation System**—Non-CFC foam covers the sides and top of the tank, reducing heat loss. This results in less energy consumption, improved efficiencies, and jacket rigidity.
- **Water Connections**—3/4" (19mm) NPT factory-installed true dielectric fittings extend water heater life and simplify water line connections.
- **3/4" (19mm) NPT Side Connections.**
- **Factory-installed Heat Traps**—Design incorporates a flexible disk that reduces heat loss in piping and eliminates the potential for noise generation.
- **Protective Anode Rod**—Provides added protection against corrosion for long-term, trouble-free service.
- **T&P Relief Valve**—Installed.
- **Thermostatic Mixing Valve (ASSE Approved)**—Included (LG1PV55H783N only).
- **Low Restrictive Brass Drain Valve**—Durable tamper proof design.
- **NOx Emissions**—Less than 40 ng/J.

### 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; 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®, ScreenLok®, TTW®, Vitraglas® and Hydrojet® are registered trademarks of Bradford White® Corporation.

# Light-Duty Commercial Power Vent Gas Water Heater

## TTW® Models

NATURAL GAS AND LIQUID PROPANE GAS

81% Recovery Efficiency

Model Number	Rated Nominal Volume		BTU/Hr. Input	LP BTU/Hr. Input	First Hour Rating (Gal.)	Uniform Energy Factor	Recovery at 100°F Rise*				Model Number	Rated Nominal Volume	kW Input	LP kW Input	First Hour Rating (Liters)	Uniform Energy Factor	Recovery at 56°C Rise*	
	U.S. Gal.	Imp. Gal.					U.S. GPH	Imp. GPH	LP U.S. GPH	LP Imp. GPH							Liters/Hour	LP Liters/Hour
LG2PV50H653N	48	42	65,000	60,000	116	0.68	63	52	56	47	LG2PV50H653N	182	19.1	17.6	439	0.68	238	212
LG1PV55H783N	55	46	78,000	78,000	125	0.68	76	63	76	63	LG1PV55H783N	208	22.9	22.9	474	0.68	288	288
LG2PV75H763N	75	62	76,000	75,500	121	0.69	74	62	73	61	LG2PV75H763N	284	22.3	22.1	459	0.69	280	276

Model Number	A Floor to Vent Conn. in.	B Jacket Dia. in.	C Vent Size in.	D Floor to T&P Conn. in.	E Floor to Gas Conn. in.	F Floor to Top of Heater in.	G Floor to Water Conn. in.	H Depth in.	J C/L of Water Conn. in.	K Floor to Space Heating Inlet in.	L Floor to Space Heating Outlet in.	M Water Conn. NPT in.	R Space Heating Conn. Size in.	S Gas Conn. Size in.	Approx. Shipping Weight lbs.
LG2PV50H653N	64 3/4	22	3 or 4	49 11/16	11 1/16	56 5/8	58 7/8	28 5/16	11	13 1/2	50 1/8	3/4	3/4	1/2	186
LG1PV55H783N	64 3/8	22	3 or 4	49 1/2	8 9/16	56 1/4	58 1/2	22 7/16	7 13/16	13 3/8	47 15/16	3/4	3/4	1/2	253
LG2PV75H763N	67 11/16	26	3 or 4	51 7/8	9 3/8	59 9/16	61 13/16	32 5/16	11	13 3/8	51 1/2	3/4	3/4	1/2	252

Model Number	A Floor to Vent Conn. mm.	B Jacket Dia. mm.	C Vent Size mm.	D Floor to T&P Conn. mm.	E Floor to Gas Conn. mm.	F Floor to Top of Heater mm.	G Floor to Water Conn. mm.	H Depth mm.	J C/L of Water Conn. mm.	K Floor to Space Heating Inlet mm.	L Floor to Space Heating Outlet mm.	M Water Conn. NPT mm.	R Space Heating Conn. Size mm.	S Gas Conn. Size mm.	Approx. Shipping Weight kg.
LG2PV50H653N	1645	559	76 or 102	1262	281	1438	1495	719	279	343	1273	19	19	13	84
LG1PV55H783N	1635	559	76 or 102	1257	217	1429	1486	570	198	340	1218	19	19	13	115
LG2PV75H763N	1719	660	76 or 102	1318	238	1513	1570	821	279	340	1308	19	19	13	114

Propane models feature a Titanium Stainless Steel propane burner.

For Propane (LP) models change suffix "N" to "X". For 5 year models, change suffix from "3" to "5".

\* Based on manufacturer's rated recovery efficiency.

120 VAC Required for Power Venting / 120 VAC, 60Hz., 3.1 Amperes.

Uniform Energy Factor and First Hour Rating is based on the latest AHRI directory listings.

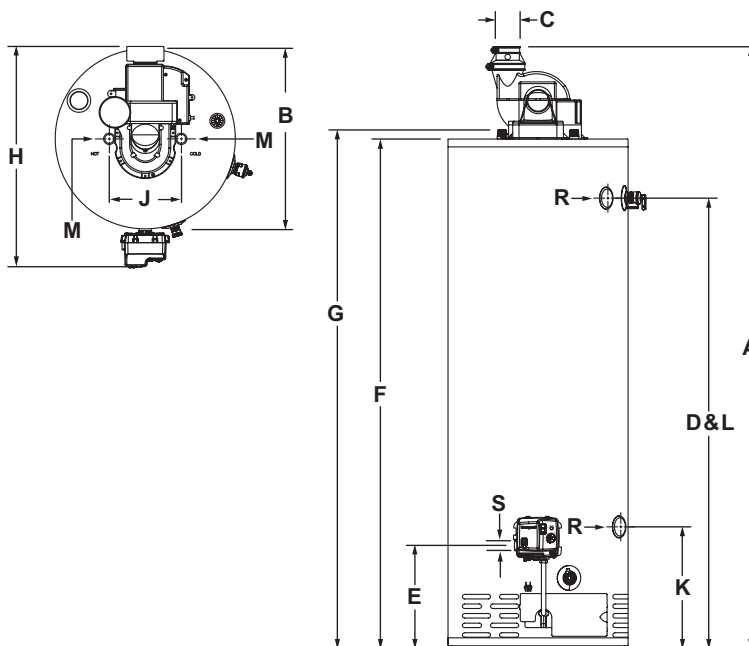
LG2PV50H653N LG1PV55H783N LG2PV75H763N	3" Vent Pipe	4" Vent Pipe
Max. Equivalent Length	†50 ft.	†180 ft.
Min. Equivalent Length	7 ft.	15 ft.
Number of 90° Elbows	1 45 ft. 2 40 ft. 3 35 ft.	175 ft. 170 ft. 165 ft.

LG2PV50H653N LG1PV55H783N LG2PV75H763N	76 mm. Vent Pipe	102 mm. Vent Pipe
Max. Equivalent Length	†15.2 m.	†54.9 m.
Min. Equivalent Length	2.1 m.	4.6 m.
Number of 90° Elbows	1 13.7 m. 2 12.2 m. 3 10.7 m.	53.3 m. 51.8 m. 50.3 m.

Subtract 5ft. (1.5m) for each additional 90° elbow

† For high altitude installations, consult the installation instructions.



### General:

All gas water heaters are certified at 300 PSI (2068 kPa) test pressure and 150 PSI (1034 kPa) working pressure. All water connections are 3/4" NPT (19mm), all gas connections are 1/2" (13mm). All models design-certified by CSA International (formerly AGA/CGA), ANSI Z21.10.1 or Z21.10.3 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.

**Customer Service / Sales: 1-866-690-0961 / 905-203-0600**  
**24/7 Technical Support: 800-334-3393 ■ Email techserv@bradfordwhite.com**

**Built to be the Best®**