Power VT® Plus

Condensing Gas Fired Water Heater
1000 to 2000 MBH

95%
thermal efficiency
at full rate

Up to 99%
thermal efficiency with
seamless VFD modulation

AquaPLEX®
engineered duplex alloy
tank and heating surfaces

- No tank lining
- No anode rods
- Superior to 316L stainless
- Super strong material for lighter weight
- 15 year tank and fire tube warranty

Pre-mix, low NOx
burner with
proportional gas/air

Electronic operating
control with Modbus
communication

PVI®
Engineered Water Heating Solutions®

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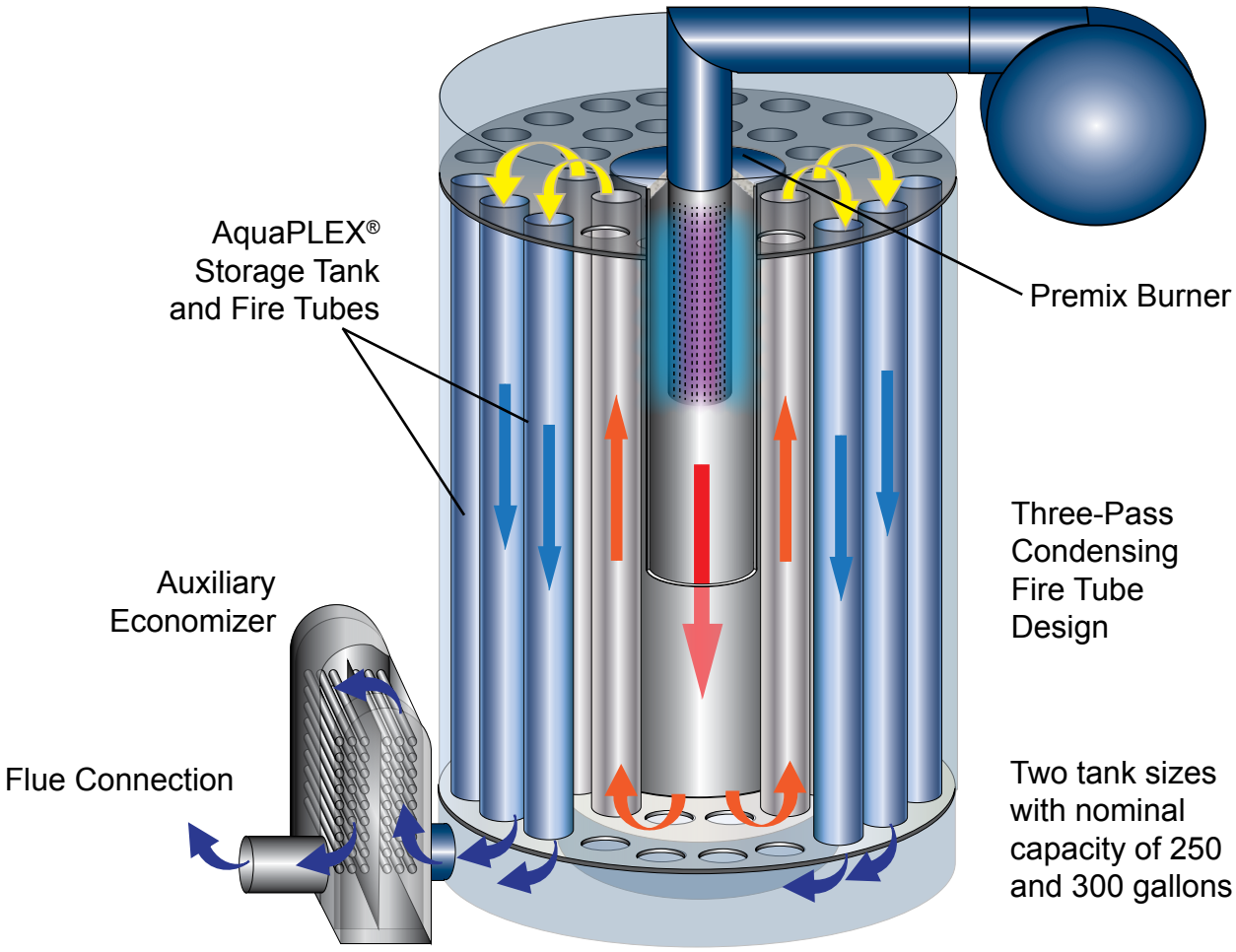


95% thermal efficiency at full firing rate with 140°F leaving water temperature. Stack temperature is only a few degrees above ambient temperature.

Low-temperature exhaust allows venting through low-cost CPVC vent material.

Draws inlet air through up to 100 equivalent feet while concurrently exhausting through 100 equivalent feet of 6-inch duct. Longer vent runs are possible through larger diameter material.

All components that contact condensate are constructed of corrosion resistant materials.

AquaPLEX tank requires no anodic protection, whether sacrificial or induced current.

All tank connections are non-ferrous and galvanically neutral to the AquaPLEX tank.

AquaPLEX tank is entirely robotically welded. Afterward, the tank is acid-cleaned and fully passivated in a process that involves complete submersion of the vessel.

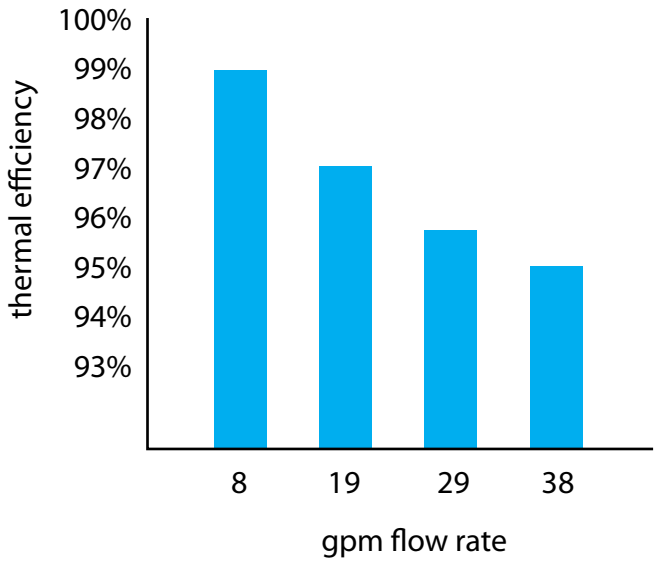
AquaPLEX® construction for a "corrosion proof" water heater

The entire pressure vessel; shell, tube sheets and fire tubes, are fabricated from AquaPLEX, an unlined duplex alloy specifically engineered for potable water service with storage temperatures in excess of 200°F.*

AquaPLEX combines the aqueous corrosion resistance of 316L stainless with the resistance to chloride corrosion seen in 400 series or ferritic stainless steels. This creates a water heater that is in every sense "corrosion proof" and results is unprecedented longevity in a water heater tank and heating surfaces.

Modulation Available

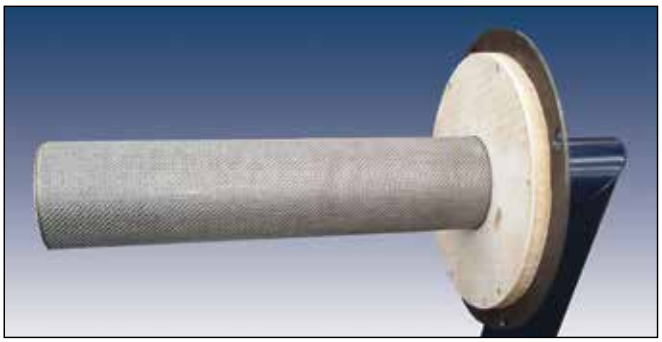
Power VT Plus is already extremely efficient at 95% at full rate, but to squeeze every last BTU out of the gas, the heater is equipped with modulation. As demand for hot water changes, the burner seamlessly modulates down through a VFD drive on the blower motor. The reduced rate allows the efficiency to climb higher than 99% during periods of low demand. The graph below shows the effect of modulation with 40°F entering and 140°F leaving water temperature in a 2 million Btu Power VT Plus water heater at different flow rates.



TempTrac® electronic operating control with Modbus RTU communication

Precise and programmable water heater operation is provided by an electronic temperature control with digital readouts of water temperature. The control offers a serial connection using Modbus RTU protocol for communication with a building automation system. This allows remote viewing of set point, probe temperatures, operating hours and alarm condition and also provides for remote nighttime setback of operating temperature if desired.

Pre-mix, surface burner with dual-fuel capability



Power VT Plus uses a metal fiber surface burner enabling low NOx operation. A zero-governor gas valve provides for infinitely proportional mixing of gas and air, assuring proper combustion under all vent pressure conditions. A combination natural gas and LP gas burner is available for backup fuel utilization.

* maximum recommended storage temperature for general purpose potable water is 140°F.

Power VT® Plus

Condensing Gas-Fired Water Heater

Available models and performance data

Model	Btu Input	Btu Output	GPH 70° to 140°F ①	GPH 40° to 140°F ②
100 SLX (300)A-PVIF	1,000,000	950,000	1629	1158
150 LX (250, 300)A-PVIF	1,500,000	1,425,000	2443	1737
180 LX (250, 300)A-PVIF	1,800,000	1,710,000	2932	2085
200 LX (250, 300)A-PVIF	2,000,000	1,900,000	3258	2317

Parenthetical information in model number indicates available tank series.
① Recovery based upon 95% thermal efficiency per DOE10 CFR 431(ANSI Z21.10.3 @ 70°F to 140°F.
② Recovery based upon 96.5% thermal efficiency with 40°F entering water temperature.

Rough-in Dimensions

Tank Series (gallons)	Width	Depth	Height
250	45	82	82
300	45	82	94

Selected Standard Equipment

- < 20 ppm NOx
- AquaPLEX® tank and fire tubes (unlined duplex alloy)
- ASME stamped and National Board Registered for 150 psi (section IV, part HLW)
- Nonferrous, removable fittings at all tank connections
- Hand hole tank cleanout
- Fiberglass insulation
- Painted steel jacket panels
- Drain valve
- Secondary economizer for low temperature flue gas
- Intertek / ETL listed to safety standard UL795
- Intertek / ETL listed for use with CPVC vent material
- Intertek / ETL certified as low-lead compliant
- FM compliant
- ASHRAE 90.1 compliant
- Seamless VFD modulation with up to a 4-to-1 turndown
- Pre-mix surface burner with self-adjusting, proportionate gas/air
- UL compliant gas train; includes regulator, dual safety shutoff valves and dual manual shutoff valves
- Electronic flame safeguard with pre- and post-purge
- Combustion sequence panel lights including lockout
- Programmable electronic operating control with digital temperature readouts
- Immersion temperature limiting device
- ASME-rated temperature and pressure relief valve
- NEMA-1 control enclosure
- Terminals for remote on-off control
- Switched contacts for remote lockout notification
- 15-year tank warranty
- First-year cost-free service policy
- Factory authorized startup

Selected Optional Equipment

- L.P. gas operation or dual fuel (natural and LP gas)
- GE-GAP (IRI) / CSD-1 code package
- Electronic low-water cutoff
- Manual-reset high limit
- CSA-rated temperature and pressure relief valve(s)
- Audible flame failure alarm with silencing switch
- Relay and proving terminals for remote combustion air louvers
- 485 serial cable to connect the electronic operating control to a Building Automation System (Modbus RTU)
- Alarm on any failure notification to BAS
- Protocol gateway for BacNet or Lonworks

Intertek Intertek LOW LEAD COMPLIANT

PVI® Engineered Water Heating Solutions®