

## Best of both water heater worlds packaged into one unit!

Energy saving benefit of high efficiency tankless water heater is combined with full stainless steel tank.

This superior water heater can provide immediate flow of hot water from its built-in 3 gallon tank.

Benefit of endless hot water is available at your finger tips!

- 0.91 UEF
- Utilizes existing ½" gas line up to 20'
- Self calibration mode - customizing unit operation parameters
- Convenient installation options - choose floor standing or wall mount installation
- Surge pressure regulator assures your unit is protected from excessive water pressure surge
- Built-in 3 gallon stainless steel tank prevents cold water sandwich
- Automated robotic welding process used on stainless steel heat exchanger construction
- Easy conversion to propane - LP orifice is already in the box
- Environmentally friendly Low NOx combustion system - SCAQMD 1146.2 compliant
- Exhaust gas temperature sensor detects potential issue before it becomes an issue
- Up to 15-year heat exchanger, 5-year parts and 1-year labor limited warranty



Designed for 2" venting  
(Up to 50')

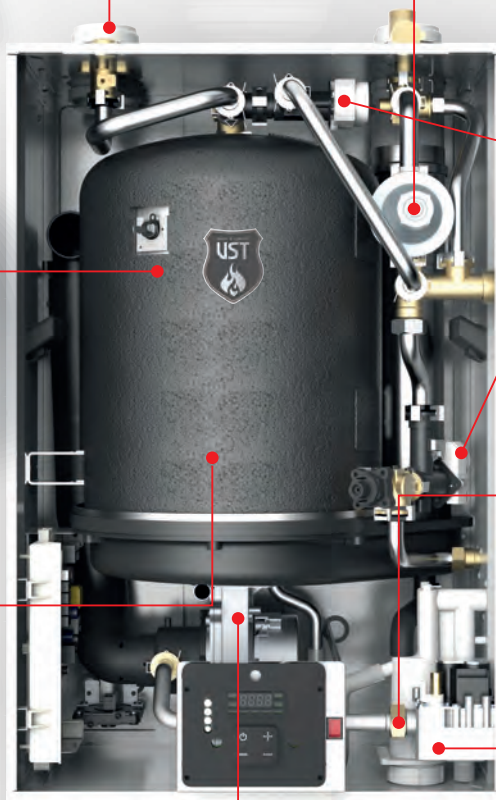


3 gallon reserve tank Low Pressure Drop  
Premium grade Stainless steel  
Fire Tube (316L)



Eco-friendly Low NOx  
Metal Fiber Burner

Fully modulating Turbo Fan



Surge pressure regulating  
valve protects  
the Heat Exchanger



Flow Control Valve +  
Mixing Valve eliminate  
the temperature fluctuation



Easy field conversion  
from NG to LP

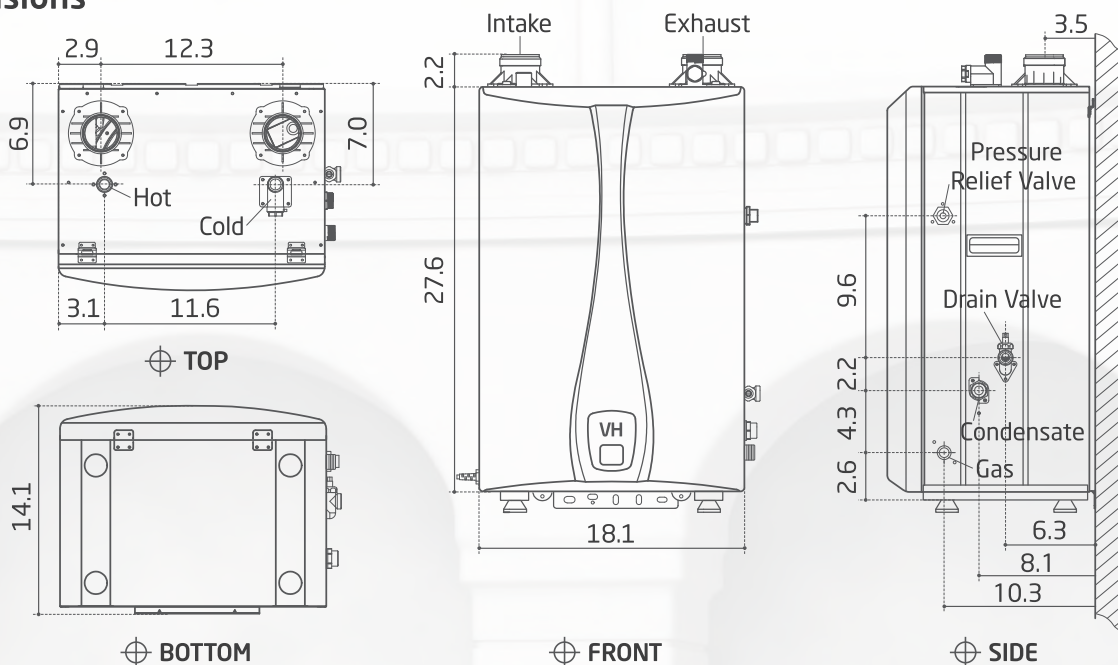
Negative Pressure Gas Valve  
for Maximum Efficiency

### Premium grade Stainless steel heat exchanger ★

- Fire Tube
- Maximizing durability
- Minimizing minerals deposits
- Ensuring crystal clear water quality



## Dimensions



## Specification

MODEL			VH-199	
Heat Capacity (Input)		Natural Gas / Propane		38,000-199,000 Btu/h
UEF				0.91
Flow Rate (DHW)	35 °F (19 °C) Temp Rise		10.8 GPM (42 LPM)	
	45 °F (25 °C) Temp Rise		8.4 GPM (32 LPM)	
	67 °F (37 °C) Temp Rise		5.6 GPM (21 LPM)	
Dimension (W x H x D)			18.1" x 27.6" x 13.6" (460 mm x 700 mm x 345 mm)	
Weight			92 lbs (42 kg)	
Installation			Indoor wall-mount or Floor standing	
Venting Type			Forced draft direct vent	
Ignition			Electronic ignition	
Water Pressure			150 psi	
Supply Pressure	Natural Gas		3.5" ~ 10.5" WC	
	Propane		8" ~ 13" WC	
Manifold Pressure	Natural Gas (Min.-Max.)		-0.02" ~ -0.25" WC	
	Propane (Min.-Max.)		-0.01" ~ -0.15" WC	
Reserve Tank			3 Gallons (11 Liters)	
Minimum Flow Rate			0.1 GPM (0.4 LPM)	
Temperature Range			98°F ~ 160°F (37°C ~ 70°C)	
Ultra Low NOx			YES	
Connection Size	Cold water inlet		3/4" NPT	
	Hot water outlet		3/4" NPT	
	Gas inlet		3/4" NPT	
	Condensate Drain		3/4" NPT	
Power Supply	Main supply		120 V AC, 60 Hz / use less than 5 amp	
	Maximum Power Consumption		95W	
Materials	Heat Exchanger		Stainless steel	
Venting	Exhaust / Intake		2" or 3" PVC, CPVC, Polypropylene 2" or 3" Special gas vent type BH (Class II, A/B/C)	
	Vent Clearances		0" to combustibles	
	Length	2"	50 ft (15 m)	
		3"	100 ft (30 m)	
Safety devices			Flame rod, APS, Over heat preventer, Surge pressure regulation valve Exhaust temperature high limit sensor Power surge fuse, Low water cut off switch	