

# ON-DEMAND RESIDENTIAL/LIGHT COMMERCIAL GAS MODELS



**GTS-510-NI  
GTS-510-PI**



**GTS-510-NE  
GTS-510-PE**



**ANSI Z21.10.3  
CSA 4.3**

Fully modulating, gas fired, tankless water heater specifically designed for residential and light commercial applications. Indoor and outdoor models available. Capable of supplying hot water for domestic hot water systems or heating applications (local codes dictate proper compliance). Features HRS35 copper alloy and a thicker heat exchanger drum for added durability. Up to four units can be easily linked without a multi-unit controller in systems for larger applications.

## FEATURES

### **Primary Heat Exchanger is Constructed of HRS35 Commercial-Grade Copper**

- Stronger than standard copper and more resilient against erosion

### **Continuous Maximum Flow Rates up to 10.0 GPM**

### **Can be used in both Residential and Light Commercial Applications**

### **ENERGY STAR® Qualified**

### **Eligible for Federal Tax Credit - visit [www.statewaterheaters.com](http://www.statewaterheaters.com) for more information**

### **Easy-Link up to 4 Units**

- With no additional parts or accessories needed
- Includes temperature controller

### **Low NOx Emissions**

### **Complies with Lead Plumbing Law**

## SAFETY FEATURES

- Built in Freeze Protection
- Manual Reset Hi Limit (Set at 194°F)
- Overheat Cutoff Fuse
- Inlet, Outlet & Mixing Thermistors for Constant Temperature Monitoring
- Air Fuel Ratio Rod
- GFI Power Supply Connection
- Flame Sensor

## Venting and Combustion

- 4" Category III Stainless Steel
- Vertical or Horizontal Installation
- 50' Max Length, 5 elbows max (90° elbows = 5' equivalent length)
- Power Vent
- Electronic Ignition - No Pilot Light
- 3" Combustion Air Intake (with optional kit)

## Optional Accessories

- Direct Vent Conversion Kit (indoor)
- Complete Line of Stainless Steel Venting
- Recess Box (outdoor)
- Pipe Cover
- Isolation Valve Kits
- Backflow Preventor
- Concentric Termination Kits

## Warranty

- 12-year limited warranty on heat exchanger in residential applications
- 5-year limited warranty on heat exchanger in commercial applications
- 5-year warranty on all parts

For more information on Residential/Light Commercial Gas On-Demand units, contact:

State Water Heaters  
500 Tennessee Waltz Parkway  
Ashland City, TN 37015  
1-877-737-2840 Toll-free USA  
[www.statewaterheaters.com](http://www.statewaterheaters.com)

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## ON-DEMAND RESIDENTIAL/LIGHT COMMERCIAL GAS MODELS

MODEL NUMBER	FUEL TYPE	GAS CONSUMPTION INPUT		ENERGY FACTOR	INLET GAS PRESSURE		MAX GPM*	DIMENSIONS (INCHES)			VOLT	AMP	FLUE**	INTAKE (OPTIONAL)	HOT/COLD GAS CONN.	APPROX. SHIPPING WEIGHT (LBS)
		MIN. BTU/H	MAX. BTU/H		MIN. W.C.	MAX. W.C.		HEIGHT	WIDTH	DEPTH						
GTS-510-NI	Natural	11,000	199,000	0.83	5.0	10.5	10.0	20.5	13.8	8.5	120	0.77	4" O.D.	3" O.D.	3/4" NPT	45
GTS-510-PI	Propane	11,000	199,000	0.82	8.0	14.0	10.0	20.5	13.8	8.5	120	0.77	4" O.D.	3" O.D.	3/4" NPT	45
GTS-510-NE	Natural	11,000	199,000	0.82	5.0	10.5	10.0	20.5	13.8	8.5	120	0.77	N/A	N/A	3/4" NPT	45
GTS-510-PE	Propane	11,000	199,000	0.82	8.0	14.0	10.0	20.5	13.8	8.5	120	0.77	N/A	N/A	3/4" NPT	45

All dimensions in inches.

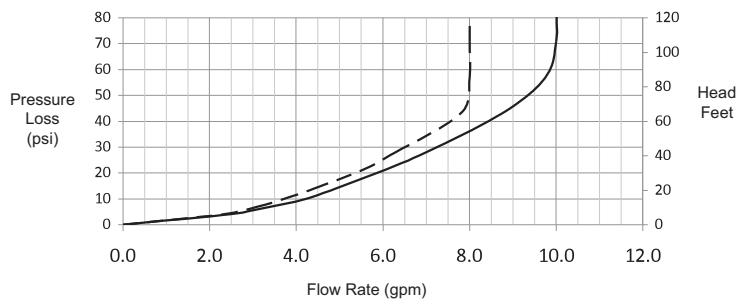
15-150 psi water pressure. 40 psi or above recommended for maximum flow.

\*Current numbers based on factory testing, 0.4 GPM required for continuous fire after initial ignition.

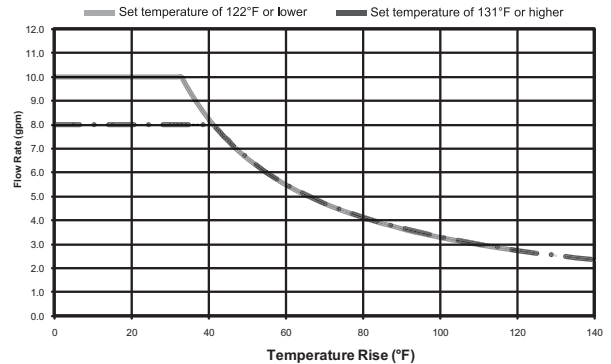
\*\*Category III required

Pressure only relief valve requires (Min. 200,000 BTUs. 150 PSI). Min 40 PSI or above recommended for maximum flow.

510 Indoor/Outdoor Pressure Loss

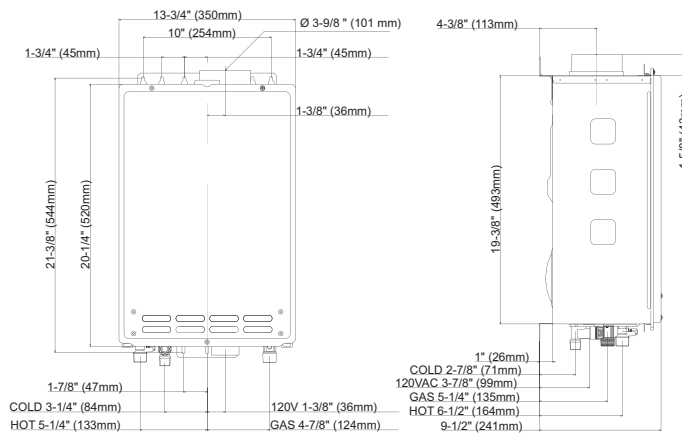


Comparison of Flow Rate vs. Temperature Rise



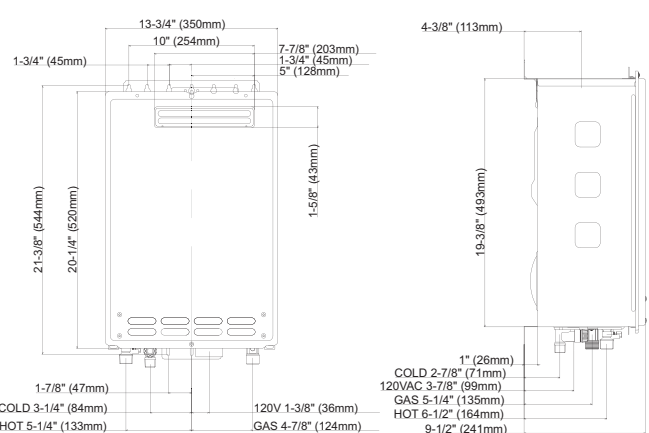
### 510 INDOOR DIMENSIONS

**CLEARANCES:** Top 12", Bottom 12", Front 24", Back 1", Sides 2"



### 510 OUTDOOR DIMENSIONS

**CLEARANCES:** Top 36", Bottom 12", Front 24", Back 1", Sides 2"



### Specification

Water heater(s) shall be Model \_\_\_\_\_ as manufactured by A. O. Smith. The water heater(s) shall be a copper coil integral fin and tube construction with quick release brass or bronze waterways. Heater(s) will be factory assembled and tested. The heater shall be vented with 4" Stainless steel Category III vent pipe a distance not to exceed 50' (equivalent) feet terminating vertically or horizontally as prescribed. Intake air with optional direct vent kit may be of such materials PVC not to exceed a total of 50' (equivalent). The heater(s) shall be controlled by onboard solid state printed circuit board monitoring incoming and outgoing temperatures with factory-installed thermistors, sensing and controlling flow rate to set point temperature with control both air and gas mixture inputs to maintain thermal combustion efficiency. Unit also consists of ground fault interrupter, inline fusing, spark ignition and sensor system, aluminized stainless steel burners, air-fuel ratio rod, Hi limit switch, modulating and proportional gas valves, freeze protection sensor and heating block and overhead cutoff fuses. The water heater(s) shall be CSA listed, exceeds the energy efficiency requirements of ASHRAE 90.1b-1992 and complies with SCAQUD Rule 1146.2 and other Air Quality Management Districts with similar requirements for low NOx emissions.

**For complete information on limited warranties, consult written warranty or contact technical support at 1-877-737-2840.**

**State Industries, Inc., reserves the right to make product changes or improvements without prior notice.**

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Ashland City, TN 37015  
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