TANKLESS NON-CONDENSING WATER HEATERS

Fully modulating, gas fired, tankless water heater specifically designed for residential and commercial applications. Supplies hot water to domestic hot water systems (directly or indirectly) which can be used with storage tanks, recirculation systems, hydronic heating systems, radiant floor heating systems, and/or combined domestic and heating applications.

FEATURES:

DESIGNED FOR PERFORMANCE

MAXIMUM FLOW RATES UP TO 10.0 GPM

AVAILABLE IN NATURAL GAS (NG) OR PROPANE (LP)

MODELS INCLUDE BOTH A REMOTE CONTROL AND POWER CORD AS STANDARD FEATURES

• Low NOx emissions
• Complies with lead free standards
• Heat exchanger (510 model) is constructed of commercial-grade copper
• Built-in freeze protection
• Easy-Link up to 4 units with no additional parts or accessories needed (510 models only)
• Air-fuel ratio (AFR) sensor
• Electronic ignition

SAFETY FEATURES:

• Manual reset hi limit (set at 194°F)
• Overheat cutoff fuse
• Inlet and outlet thermistors for constant temperature monitoring
• Flame sensor

OPTIONAL ACCESSORIES:

• Complete line of Category III venting
• Direct vent conversion kits (TK-TV10)
• Isolation valve kits (TM-IV01-AB)
• Backflow preventer (2SVBFDPA04)
• Concentric direct vent kit (2SVSHTCKIT43)
• Pipe cover (TK-PCJr2 for 110 models, TK-PC01 for 310/510 models)

WARRANTY

• 15-year limited warranty on heat exchanger in residential applications
• 10-year limited warranty on heat exchanger in commercial applications
• 5-year warranty on all parts
## ATI-110 DIMENSIONS

**CLEARANCES:** TOP 12”, BOTTOM 12”, FRONT 4”, BACK 1”, SIDES 3”

### ATI-110-N
- **Type:** Natural
- **Gas Consumption:** 19,500 BTU/h
- **Input:** 140,000 BTU/h
- **Minimum In. W.C.:** 5.0
- **Maximum In. W.C.:** 10.5
- **Energy Factor (EF):** 0.82
- **Maximum GPM:** 6.6
- **Hot/Cold Connections:** ¾” NPT / ¾” NPT
- **Height:** 20 ¼ (52)
- **Width:** 13 ¾ (35)
- **Depth:** 7 ¾ (20)
- **Unit Weight:** 33 (15) LB (KG)

### ATI-110-P
- **Type:** Propane
- **Gas Consumption:** 19,500 BTU/h
- **Input:** 140,000 BTU/h
- **Minimum In. W.C.:** 8.0
- **Maximum In. W.C.:** 14.0
- **Energy Factor (EF):** 0.82
- **Maximum GPM:** 6.6
- **Hot/Cold Connections:** ¾” NPT / ¾” NPT
- **Height:** 20 ¼ (52)
- **Width:** 13 ¾ (35)
- **Depth:** 7 ¾ (20)
- **Unit Weight:** 33 (15) LB (KG)

### ATI-310-N
- **Type:** Natural
- **Gas Consumption:** 11,000 BTU/h
- **Input:** 190,000 BTU/h
- **Minimum In. W.C.:** 5.0
- **Maximum In. W.C.:** 10.5
- **Energy Factor (EF):** 0.82
- **Maximum GPM:** 10
- **Hot/Cold Connections:** ¾” NPT / ¾” NPT
- **Height:** 20 ¼ (52)
- **Width:** 13 ¾ (35)
- **Depth:** 9 ½ (24)
- **Unit Weight:** 39 (18) LB (KG)

### ATI-310-P
- **Type:** Propane
- **Gas Consumption:** 11,000 BTU/h
- **Input:** 190,000 BTU/h
- **Minimum In. W.C.:** 8.0
- **Maximum In. W.C.:** 14.0
- **Energy Factor (EF):** 0.82
- **Maximum GPM:** 10
- **Hot/Cold Connections:** ¾” NPT / ¾” NPT
- **Height:** 20 ¼ (52)
- **Width:** 13 ¾ (35)
- **Depth:** 9 ½ (24)
- **Unit Weight:** 39 (18) LB (KG)

### ATI-510-N**
- **Type:** Natural
- **Gas Consumption:** 11,000 BTU/h
- **Input:** 199,000 BTU/h
- **Minimum In. W.C.:** 8
- **Maximum In. W.C.:** 10.5
- **Energy Factor (EF):** 0.82
- **Maximum GPM:** 10
- **Hot/Cold Connections:** ¾” NPT / ¾” NPT
- **Height:** 20 ¼ (52)
- **Width:** 13 ¾ (35)
- **Depth:** 9 ½ (24)
- **Unit Weight:** 39 (18) LB (KG)

### ATI-510-P**
- **Type:** Propane
- **Gas Consumption:** 11,000 BTU/h
- **Input:** 199,000 BTU/h
- **Minimum In. W.C.:** 10
- **Maximum In. W.C.:** 14.0
- **Energy Factor (EF):** 0.82
- **Maximum GPM:** 10
- **Hot/Cold Connections:** ¾” NPT / ¾” NPT
- **Height:** 20 ¼ (52)
- **Width:** 13 ¾ (35)
- **Depth:** 9 ½ (24)
- **Unit Weight:** 39 (18) LB (KG)

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

*Current numbers based on factory testing, 0.5 GPM required for activation, 0.4 GPM required for continuous fire after initial ignition.

**Suitable for commercial applications.

Models are certified from sea level to 6,000 ft. elevation.
SUGGESTED SPECIFICATION FOR THE ATI-510

The fully modulating, on-demand, gas fired tankless water heater shall be A. O. Smith Tankless Water Heater model ATI-510, having a maximum input rating of 199,000 BTU/h and available in NG or LP. The heater shall have ¾ in. male NPT water and gas connections. The inlet gas supply pressures shall be 5.0 in. WC (min.) up to 10.5 in. WC (max.) for NG and 8.0 in. WC (min.) up to 14 in. WC (max.) for LP. The heater shall be supplied with a temperature remote, 9007603005, that can be installed up to 400 ft. from the heater using 20 gauge (minimum) control wire. The temperature remote shall provide diagnostic information, fault history, and heater set temperature. The heater shall operate using 120 V / 60 Hz power source. The heater will incorporate a factory installed power cord.

The heater shall be vented with 4” diameter Category III vent pipe with a length not to exceed 50 ft. (equivalent), terminating horizontally or vertically. The heater can be direct vented with optional direct vent conversion kit, 9007667005, using 3” diameter intake air pipe. The intake pipe may use material such as PVC, ABS, aluminum, or Category III pipe and cannot exceed 50 ft. (equivalent) length.

The water heater shall use a commercial grade copper alloy, fin tube heat exchanger with quick release brass or bronze waterways. The heater shall be controlled by an onboard solid-state printed circuit board which uses the following factory installed components: thermistors to monitor inlet and outlet water temperature; a flow sensor to measure flow rate; a flame sensor to monitor combustion; an Air-Fuel Ratio Rod to measure and adjust operation in order to maintain optimal combustion efficiency. The heater also consists of inline fusing and surge absorbers for electrical surge protection, an electronic spark igniter, aluminized stainless steel burners, a hi-limit temperature switch, modulating gas valve, an overheat cutoff fuse, ceramic heating blocks to protect the heat exchanger and water piping. The heater shall incorporate auto-fire system for additional freeze protection.

The heater can manifold to Easy-Link up to 4 heaters to provide additional capacity. The Easy-Link controls shall be built onto the onboard solid-state printed circuit board and does not require external controls. The linking control wire shall be supplied with the heater. The Easy-Link control shall modulate the system for the most efficient performance. The Easy-Link control shall rotate the priority heater every 12 hours of operation time or 100 starts for balanced duty/cycle operation.

The heater shall be design certified by CSA according to ANSI Z21.10.3, approved for sale in Canada, have a minimum energy factor of 0.82, and meet the energy efficiency requirements of NRCan and current edition of ASHRAE 90.1.