

TANKLESS HIGH EFFICIENCY CONDENSING MODELS

FEATURES

DESIGNED FOR PERFORMANCE

- Condensing technology provides UEF of up to 0.94
- Primary heat exchanger is constructed of commercial-grade copper which is more resilient against erosion
- Secondary heat exchanger is made of Type 316L Stainless Steel to protect against corrosion
- Continuous maximum flow rates up to 10.0 GPM
- Available in natural gas (NG) or propane (LP)
- Electronic ignition - no pilot light
- Includes a built-in temperature controller and advanced diagnostics for easy troubleshooting
- Factory-installed power cord
- New 540P model with integrated recirculation pump
- Easy-Link up to 4 units with no additional parts or accessories needed using built-in Easy-Link System (540 models only)
- Multi-link up to 20 units (540 models only) with a multi-unit controller
- Internal freeze protection system

SAFETY FEATURES

- Air-Fuel Ratio (AFR) Sensor
- Exhaust & water temperature safety control
- Overheat cut-off fuse

POWER DIRECT VENT DESIGN

- Exhaust, 3" venting up to 70 equivalent feet or 4" venting up to 100 equivalent feet
- Provides flexible venting with ULC S636 approved PVC, CPVC or polypropylene pipe for intake and exhaust (solid core only)
- Category III/IV Stainless Steel venting can also be used

WARRANTY

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



ATI-240H
ATI-340H
ATI-540H



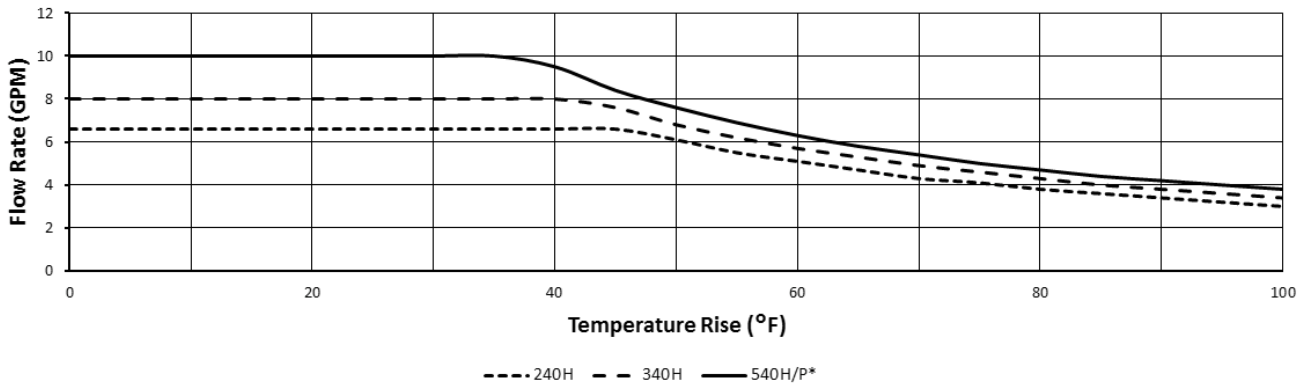
ATI-540P



540H model only

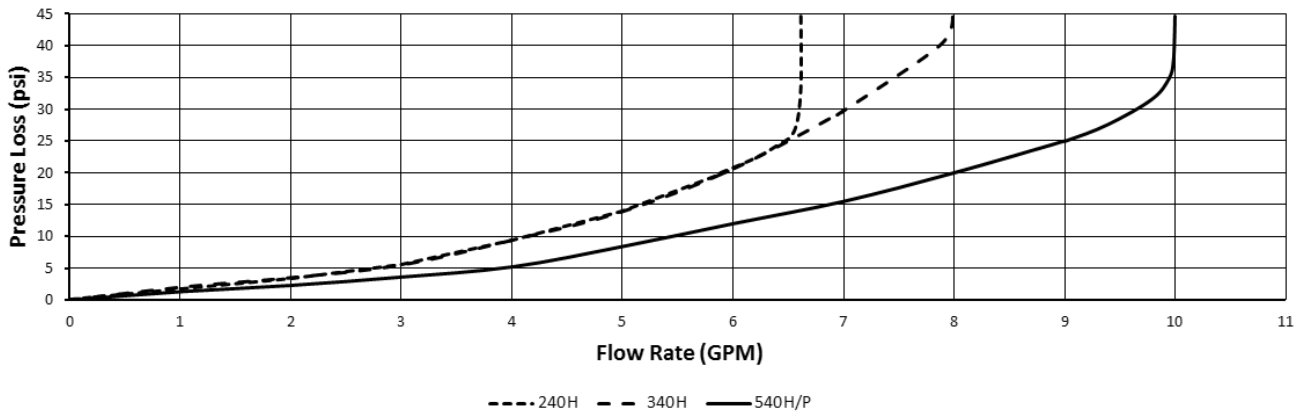
ANSI Z21.10.3 CSA 4.3

FLOW RATE vs TEMPERATURE RISE



*Maximum flow rate with set temperature above 130°F (55°C) is 8.0 GPM.

PRESSURE LOSS vs FLOW RATE





Residential Gas Tankless Water Heaters

Optional Accessories

PART NUMBER	DESCRIPTION
100112163	Concentric termination kit
100112159	Condensate neutralizer kit
100209924	Remote temperature controller for temperatures up to 167°F (240H/340H/540H models only)
100112572	Remote temperature controller for temperatures up to 185°F (540H models only)
100276687	Remote temperature controller for temperatures up to 140°F (540P only)
100112691	Multi-unit controller (540H/P models only)
100112156	Isolation valve kit (with Pressure Relief Valve)
100112718	Pipe cover
100113154	Product Preservers® Anti-Scale System
100113130	Non-return valve for Common Vent Systems

SAMPLE SPECIFICATION

Water heater(s) shall be A. O. Smith tankless water heater model _____, having a maximum input rating of _____ BTU/h. The heater shall have ¾" male NPT water and gas connections. The inlet gas supply pressures shall be _____ in. WC (minimum) up to _____ in. WC (maximum) for _____ fuel. The heater(s) shall incorporate an integrated temperature controller that will provide heater set temperature, diagnostic, and fault history information.

The water heater(s) shall be vented with 3" or 4" ULc S636 approved Schedule 40 PVC or CPVC, polypropylene, or Category IV vent pipe with a length not to exceed 70' (equivalent) for 3" vent or 100' (equivalent) for 4" vent, terminating horizontally or vertically. The intake air pipe may be of such material as PVC or CPVC, ABS, polypropylene, aluminum, or Category IV pipe and cannot exceed 70' (equivalent) for 3" pipe or 100' for 4" pipe.

The water heater(s) shall use a commercial grade copper alloy, fin tube primary heat exchanger with quick release brass or bronze waterways, and a 316L stainless steel secondary heat exchanger. The heater(s) shall be controlled by an onboard solid-state printed circuit board using thermistors to monitor inlet and outlet water temperature and exhaust temperature, a flow sensor to measure flow rate, a flame sensor to monitor combustion, and an air-fuel ratio rod to measure and adjust operation in order to maintain optimal combustion efficiency. The heater(s) shall also consist of inline fusing and surge absorbers for electrical surge protection, an electronic spark igniter, aluminized stainless steel burners, hi-limit temperature switch to monitor water temperature, modulating gas valve, and an overheat cutoff fuse. The heater(s) shall include an exhaust temperature monitoring system using an exhaust thermistor and automatic hi-limit switch to maintain safe exhaust temperatures for Schedule 40 PVC and incorporate ceramic heating blocks and an auto-fire system for freeze protection of the heat exchanger and water piping.

The water heater(s) shall be design certified by CSA according to ANSI Z21.10.3 - CSA 4.3 and meet the energy efficiency requirements of NRCan and the current edition of ASHRAE 90.1.

MODEL	FUEL TYPE	GAS CONSUMPTION INPUT		INLET GAS PRESSURE		UEF	MAX GPM*	HOT/COLD AND GAS CONN.	DIMENSIONS IN (CM)			UNIT WEIGHT LB (KG)
		MIN. BTU/h	MAX. BTU/h	MIN. W.C.	MAX. W.C.				HEIGHT A	WIDTH B	DEPTH C	
ATI-240H-N	Natural	15,000	160,000	5.0	10.5	0.94	6.6	¾" NPT	23 ⅝ (60)	17 ¾ (45)	11 ¼ (29)	71 (32)
ATI-240H-P	Propane	13,000	160,000	8.0	14.0	0.94	6.6	¾" NPT	23 ⅝ (60)	17 ¾ (45)	11 ¼ (29)	71 (32)
ATI-340H-N	Natural	15,000	180,000	5.0	10.5	0.94	8.0	¾" NPT	23 ⅝ (60)	17 ¾ (45)	11 ¼ (29)	71 (32)
ATI-340H-P	Propane	13,000	180,000	8.0	14.0	0.94	8.0	¾" NPT	23 ⅝ (60)	17 ¾ (45)	11 ¼ (29)	71 (32)
ATI-540H-N	Natural	15,000	199,000	5.0	10.5	0.93	10.0	¾" NPT	23 ⅝ (60)	17 ¾ (45)	11 ¼ (29)	71 (32)
ATI-540H-P	Propane	13,000	199,000	8.0	14.0	0.93	10.0	¾" NPT	23 ⅝ (60)	17 ¾ (45)	11 ¼ (29)	71 (32)
ATI-540P-N	Natural	15,000	199,000	4.0	10.5	0.93	10.0	¾" NPT	23 ⅝ (60)	17 ¾ (45)	11 ¼ (29)	71 (32)
ATI-540P-P	Propane	13,000	199,000	8.0	14.0	0.93	10.0	¾" NPT	23 ⅝ (60)	17 ¾ (45)	11 ¼ (29)	71 (32)

15-150 psi Water Pressure. 40 psi or above is recommended for maximum flow.

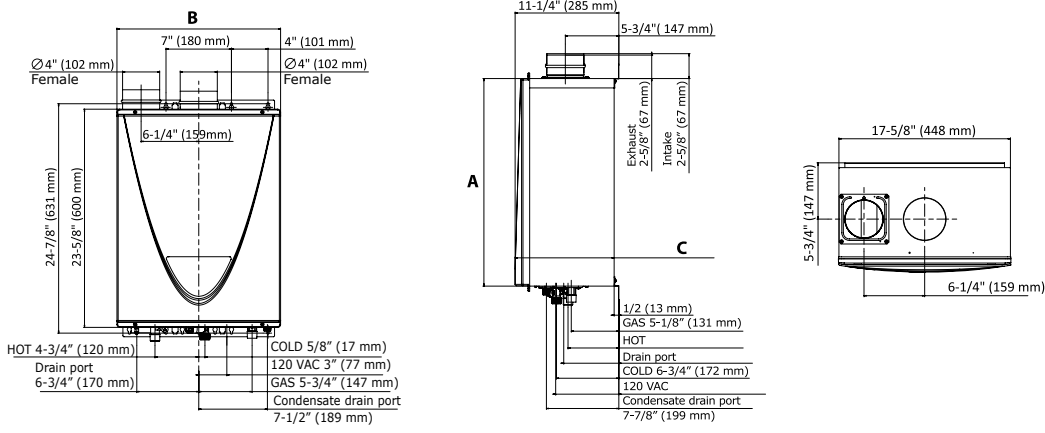
*Current numbers based on factory testing; 0.4 GPM required for continuous fire after initial ignition.

Models are certified from sea level to 10,100 ft. (3,078 m) elevations.

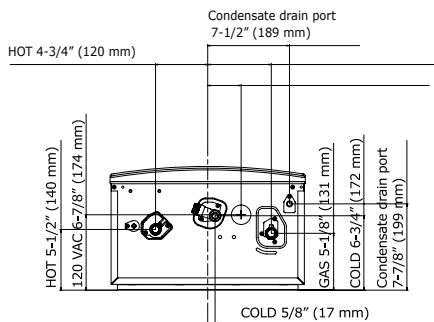
The manufacturer reserves the right to discontinue, or change at any time, specifications or designs without notice and without incurring obligation.

ATI-240H, ATI-340H and ATI-540 H/P DIMENSIONS

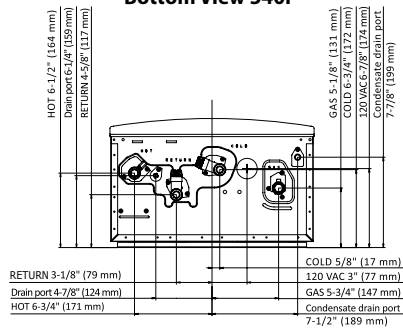
MINIMUM CLEARANCES: TOP 12", BOTTOM 12", FRONT* 4", BACK 1", SIDES 3"
 *Recommended 24" clearance from front of unit for maintenance



Bottom View 240H, 340H, and 540H



Bottom View 540P



For Technical Information call 888-599-2837. A. O. Smith Enterprises Ltd. reserves the right to make product changes or improvements without prior notice.