

# Adapt<sup>™</sup> Premium Condensing **Gas Tankless Water Heater**

## What's in the box?

- ATHR-160M / ATHR-160X3 / ATHR-180M / ATHR-180X3 / ATHR-199M / ATHR-199X3
- Installation manual .
- . Use and case guide
- X3<sup>™</sup> Cartridge (X3<sup>™</sup> models only) .
- Pressure relief valve (X3<sup>™</sup> models only)
- . Wall mounting bracket with four 1/4" x 3" lag bolts
- . Screws for vent ports
- X3<sup>™</sup> cartridge screws (X3<sup>™</sup> models only) .
- Cascading cable .
- Fuel conversion kit (NG to LP) .
- Two 2" vent screens .

## **Available Accessories**

Part number	Description	
100368986	X3™ cartridge	
100371922	Wi-Fi module kit	
100371898	Remote temperature controller comes with 10 ft. cable	
100371899	Communication cable for remote temperature controller 10 ft.	
100371900	Communication cable for remote temperature controller 32 ft.	
100371920	Remote recirculation kit (one receiver, two buttons)	
100371921	Remote recirculation kit (one receiver, three buttons)	
100371913	Individual spare buttons	
100325654	Cartridge freeze protection for X3 <sup>™</sup> models	
100371918	Cartridge freeze protection for bypass models	
100374697	Pipe cover	
100112159	Neutralizer kit	
100327167	Crossover valve kit	
100112156	Isolation valve kit for bypass model	

# **Venting Considerations**

PVC, CPVC or Polypropylene ULC S636 systems only

No. of 90-degree	Maximum Vertical or Horizontal (Total) Vent Length		
Elbows*	2" venting	3" venting	
0	75 ft. (22.9 m)	150 ft. (45.7 m)	
1	70 ft. (21.3 m)	145 ft. (44.2 m)	
2	65 ft. (19.8 m)	140 ft. (42.7 m)	
3	60 ft. (18.3 m)	135 ft. (41.1 m)	
4	55 ft. (16.8 m)	130 ft. (39.6 m)	
5	50 ft. (15.2 m)	125 ft. (38.1 m)	

\*For each 90-degree elbow added, deduct 5 ft. 45-degree elbows count as 2.5 ft. Excludes vent terminators, termination elbow or rain caps. Can be installed as PV or PDV.





## **Installation Clearance**

Тор	Side	Front	Bottom	Back
12"	3"	4"	18"	1/2"

### **Gas Considerations**

- Minimum 1/2" gas line
- Minimum 3 ft. from regulator
- Field convertible from NG to LP

### Water Connection

- 3/4" NPT
- No isolation valve kit required on the X3<sup>™</sup>
- Ball valves may be required by code:
  - X3™ models: we recommend installing a ball valve with shutoff to easily isolate the heater for troubleshooting and service in the future.
  - M models: we recommend installing an isolation valve kit with hose bibs, for ease of annual descaling and routine maintenance.
- Manual cold water shut off recommended

## **Condensate Draining**

The condensate drain port on the bottom of the heater is a nylon ½" NPT male fitting. Note: it's best practice to add an overflow to external condensate management systems.

Maximum Pipe Length - Hot Water Supply Line and Dedicated Return line				
Pipe Diameter	Pipe Length			
3/4"	500 ft. (152 m)			
1/2"	200 ft. (61 m)			

## **Recirculation Pump Operation Modes**

#### Recirculation with a dedicated line

Two pump timer ON/OFF periods set by the user manually.

#### Crossover valve mode

Valve settings differ by manufacturer (typical is 95°F to 105°F).

#### On-demand mode

Used with remote circulation kit.

#### **Combination Heating Compatible**

Can be used for space heating when combined with water heating.

#### **Cascade System**

Cascade up to 12 units in a parent/child configuration. Patch cord included.

## **Freeze Protection System**

- Always ON when the unit is powered
- Multiple heating blocks protect internal piping
- The unit will briefly fire to protect against freezing
- In the event of a prolonged power failure, the unit must be drained

## **Routine Maintenance**

- Clean the inlet water filter
- Descaling (M models only)
- Check venting system annually
- Exercise the relief valve annually
- Inspect the condensate drain system regularly
- Inspect the rain protection tray screen annually

For internal use only.

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