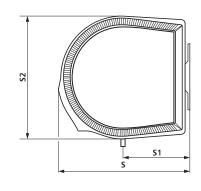
SPECIFICATIONS

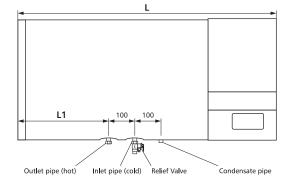
MODEL	HPW-60	HPW-80
Rated volume [L]	60	80
Rated voltage [V] / Rated frequency [Hz]	220V / 50	220V / 50
Rated input power [W] / Rated current [A]		
Energy-saving mode	250 / 1.25	250 / 1.25
Electrical mode heating	3,000 / 13.7	3,000 / 13.7
Net weight [kg]	46	50
Inner tank rated pressure [MPa]	0.8	0.8
Range of water temperature [°C]	35-75	35-75
Environment range of energy-saving mode [°C]	10-43	10-43
Name of refrigerant	R134a	R134a
Refrigerant filling volume [g]	156	156
Noise level [dB[A]]	≤ 40	≤ 40

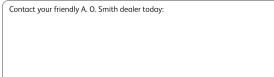
DIMENSIONS

MODEL	HPW-60	HPW-80
L [MM]	895	1050
S [MM]	501	510
S1 [MM]	250	250
S2 [MM]	480	480
L1 [MM]	290	335



QUALITY ASSURANCE









Manufactured by A. O. Smith India Water Heating Private Limited

PUNE REGIONAL OFFICE

401 & 402, Citi Mall, Ganeshkhind Road Near Pune University, Pune – 411007, India.

DELHI REGIONAL OFFICE

602, Laxmi Deep Building, Plot 9, Laxmi Nagar District Centre, Vikas Marg, New Delhi – 110092, India.

CORPORATE OFFICE

Plot 300, Phase - II, KIADB Industrial Area. Harohalli, Kanakpura Taluk, Ramanagara District, Karnataka - 562 112, India.

*Conditions apply.

Air2Heat Water Heaters.

Generates heat from air. Saves upto 60% on electricity.





Renewable energy water heater. Reliable and energy saving.

- A. O. Smith Air2Heat water heater is an advanced and innovative product that generates heat from the environment. It is a clean and efficient use of free energy source to provide hot water.
- A. O. Smith Air2Heat water heater uses very little energy. For each unit of electrical consumed, it generates 2.3 units of heat energy. Saves upto $60\,\%$ of electricity compared to electric water heaters.
- Based on reliable and well proven technology, A. O. Smith Air2Heat water heaters work all year round, day and night, and are more convenient and more reliable than Solar water heaters.
- A. O. Smith Air2Heat water heater has in-built intelligent functions and all operations are automatic.
- A. O. Smith Air2Heat water heater is available in large 60 & 80 litre capacities, and a single installation can provide hot water to two-three bathrooms.



Featured model is available in 60 & 80 litre capacities.

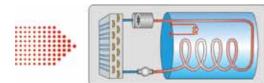
Compared to an electric water heater.

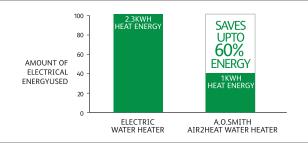


INTRODUCTION

Advanced and Innovative Product that Generates Heat from the Environment

- The A. O. Smith Air2Heat water heater is an advanced and innovative product that generates heat from the environment. It uses electricity to move heat from one place to another instead of using electricity to heat the water. It therefore uses very little energy.
- Outside air, at any temperature above absolute zero, contains some heat. The A. O. Smith Air2Heat water heater moves [pumps] some of this heat from outside to provide hot water inside. To move the heat, the A. O. Smith Air2Heat water heater works like a refrigerator in reverse. While a refrigerator pulls heat from inside the refrigerator and transfers it into the surrounding room, the A. O. Smith Air2Heat water heater pulls heat from the surrounding air and transfers it into a tank to heat water.



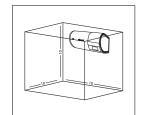


Provides 2.3 times more Energy than it uses

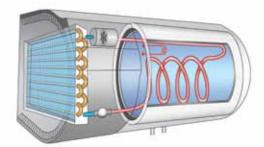
- The A. O. Smith Air2Heat water heater is a high efficiency device that can provide up to 2.3 KWh of heat energy by using 1 KWh of electrical energy.
- It can generate the same amount of heat energy as an electric water heater by using only 40 % of the energy. With the A. O. Smith Air2Heat water heater you can save up to 60 % + of your energy

Installation Requirements

- While the A. O. Smith Air2Heat water heater is a compact water heater that occupies about 0.219 cubic meters [7.8 cubic feet] volume and can be wall mounted, for effective and efficient functioning, it needs to be installed in an enclosed area of at least 100 cubic feet.
- However, if the installation area is open to air, there is no minimum space requirement.





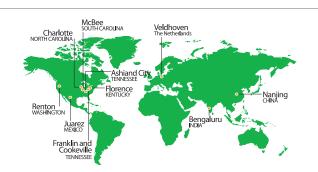


Intelligent & Automatic Operations

- A. O. Smith Air2Heat water heater has in-built intelligent functions and all operations are automatic.
- A. O. Smith Air2Heat water heater is available in large 60 & 80 litre capacities, and a single installation can provide hot water to two-three bathrooms.
- The A. O. Smith Air2Heat water heater has very few moving parts. This reduces maintenance requirements. Built to last, it has an attractive and high-quality finish.

A. O. Smith: A History of Innovation

• A. O. Smith Corporation is the largest water heater manufacturer in North America and a global leader in innovative technology and energy efficient solutions. Founded in 1874, A. O. Smith are the inventors and developers of the patented process to glass-line water heaters. Over the years, A. O. Smith has gained the respect and support of homeowners, contractors, architects, and specifying engineers in over 60 countries by providing innovative energy efficient products designed for years of trouble-free service.



HOW DOES THE A. O. SMITH AIR2HEAT WATER HEATER WORK?

The A. O. Smith Air2Heat water heater uses a gas refrigerant, which when compressed turns into a liquid.

STAGE 1

- An evaporator heat exchanger, absorbs heat from ambient air.
- The liquid refrigerant at a low temperature passes through the evaporator heat exchanger, where ambient heat is used to cause the liquid to boil and turn in to gas.

STAGE 2

- A compressor moves the refrigerant through the unit.
- This gas is then compressed by a compressor, which further increases its temperature.

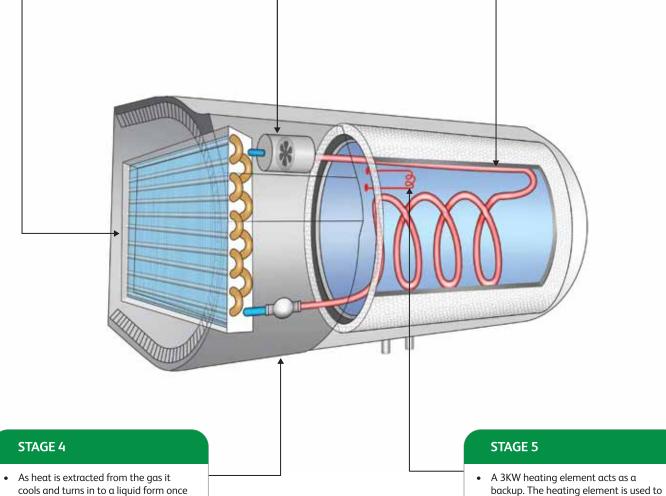
STAGE 3

- A condenser heat exchanger, transfers the heat into a water tank.
- Heat from this hot gas is extracted through the condenser heat exchanger and used to heat water.

further increase the temperature of

is not reached.

water in case the desired temperature



cools and turns in to a liquid form once again and the cycle continues.

KEY FEATURES

EFFECTIVE AND EFFICIENT

The A. O. Smith Air2Heat water heater effectively and efficiently absorbs and moves thermal energy from the environment to inside the tank, to heat water.



Air2Heat water heaters is one of the advanced technology in residential water heaters.

ELECTRIC BACKUP

The A. O. Smith Air2Heat water heater incorporates a 3KW heating element that acts as a heating element.
This acts as a backup in case the water has not reached the desired temperature.



ENERGY SAVING

A. O. Smith Air2Heat water heaters are highly efficient, energy saving and environment friendly devices. They consume only 40% of the energy used by a conventional electric water heater.



DIGITAL DISPLAY AND WIRED REMOTE

The A. O. Smith Air2Heat water heater has a built-in digital display for key parameters and readings, and a wired remote for ease of operations.

The user definable functions and parameters are setting of Mode, Timers, Override, AES [Adaptive Energy Saving System], Temperature Setting, Hot Water Display Quantity and Power-off Memory Function.

The LED display also shows diagnostics on the unit's malfunctions. This enables the service technician to efficiently repair the unit.

WARRANTY

A. O. Smith Air2Heat water heater uses international quality compressors and high quality accessories and materials. With our careful manufacturing and strict quality control, A. O. Smith Air2Heat water heaters assure you the best quality and long life expectancy.

A. O. Smith Air2Heat water heater are backed by a 7 years warranty on the tank and 2 years warranty on the whole unit.

INTELLIGENT CONTROL FEATURES



ES AES [ADAPTIVE ENERGY-SAVING SYSTEM] FUNCTION

The A. O. Smith Air2Heat water heater has unique AES feature which adopts the heating cycles to the water utilization habit of the user. This enables the Air2Heat water heater to switch on automatically at required time, saving energy and minimizing thermal losses.



INSTANT

Users can select electric heating by pressing 'override' key and Air2Heat starts electrical heating immediately to reach the pre-set temperature.



AUTOMATED FUNCTIONS

The A. O. Smith Air2Heat water heater has automated functions that monitors several critical functions and adjusts operations to maximize performance and reliability



DISPLAY OF HOT WATER AMOUNT

A. O. Smith Air2Heat water heater has a function of displaying amount of hot water available.



USER SETTINGS FOR THREE ENERGY MODES

The A. O. Smith Air2Heat water heater can be set by the user to operate in three energy modes:

- The high efficiency mode uses only environmental heat to heat the water.
- The hybrid mode uses the heating element only if the temperature of the water has not reached the desired level.
- The electric mode in which the heating element directly heats the water.



PROGRAMMABLE TIMER

The A. O. Smith Air2Heat water heater timer enables the unit to switch on automatically at pre-set times of the day, in energy saving mode.



POWER-OFF MEMORY FUNCTION

A. O. Smith Air2Heat water heater can retain the set information for 48 hours, even in power off condition.

GLASS LINED TANK



GLASS LINED TANK

Glass Lining offers the protection against tank corrosion and increases life of the water heater. The lining is stronger and more water-resistant than any other in the industry.



GLASS LINED HEAT EXCHANGER

Glass Lining of the heat exchanger offers protection against corrosion and increases life of the water heater. The lining is stronger and more corrosion-resistant than any other in the industry.



SPECIAL INNER TANK

A. O. Smith Air2Heat water heater come with a special glass lined inner containers. This lining is achieved through a specialized fusion process. The tanks are designed to pass 1,00,000 cycle fatigue test. This makes it one of the best tanks resistant to rust and scaling.

OTHER FEATURES



COMPRESSOR

The compressor in the A. O. Smith Air2Heat water heater is an industry leader for performance and durability.



ANODE PROTECTION

A strong steel core anode rod is used for protecting the water tank. It greatly prolongs the service life of the A. O. Smith's Air2Heat water heater.



ENVIRONMENT FRIENDLY REFRIGERANT

The R134A refrigerant used in the A. O. Smith Air2Heat water heater is environment friendly and does deplete ozone.



HIGH EFFICIENCY ENERGY-SAVING THERMAL INSULATING LAYER

A polyurethane foam insulating layer is used, which provides good insulating property and reduces heat loss effectively.



QUIET OPERATIONS

The A. O. Smith Air2Heat water heater operates at a quiet sound level of approximately 40 dBA.

SAFETY FEATURES



HIGH TEMPERATURE LIMIT PROTECTION SWITCH

The A. O. Smith Air2Heat water heater has a built-in high temperature protection switch. The switch cuts off the power supply to ensure safety in case the water temperature exceeds the highest pre-set temperature.



RELIEF VALVE

The relief valve relieves pressure automatically while the pressure in the inlet pipe exceeds the set pressure.

WHY A. O. SMITH'S AIR2HEAT WATER HEATER IS ADVANCED AND BETTER THAN SOLAR WATER HEATERS.

EASY TO INSTALL

Easy to install

- The A. O. Smith Air2Heat water heater can be wall mounted and installed indoors in the loft area.
- A. O. Smith Air2Heat water heater have volumes as small as 0.22 cubic meters [7.7 cubic feet].
- They can be placed in enclosed spaces as small as 100 cubic feet.
- In open to air areas there is no minimum space requirement.

• Solar water heaters typically occupy very large spaces.

• Solar water heaters requires outdoor or rooftop installation

Reduce plumbing costs

- A. O. Smith Air2Heat water heater require minimum plumbing as they can be easily installed in the bathroom or in the loft.
- Solar water heaters need to be installed outdoors and require extensive installation and plumbing up to the bathroom, kitchen and other points of use.

EASY TO OPERATE AND MAINTAIN

Year round operations

- A. O. Smith Air2Heat water heater works 365 days.
- A. O. Smith Air2Heat water heater work any time of the day and can give you piping hot water even in the middle of the night.
- The performance of solar water heaters is seasonal.
- Solar water heaters give comparatively less hot water in monsoons and winter, which is when you need hot water the most.

Automatic backup

- The A. O. Smith Air2Heat water heater has an advanced hybrid unit with backup electrical heating which can cater to peak hot water requirements.
- A. O. Smith Air2Heat water heater are equipped with AES [Adaptive Energy-Saving System]. This enables automatic switchover to electrical heating when required.
- Solar water heaters cannot cater to peak loads.

Leakages and Wastage

- The special Glass Lined Tank of the A. O. Smith Air2Heat water heater offers the best protection against tank corrosion and increases the life of the water heater.
- The A. O. Smith Air2Heat water heater can be installed in bathrooms. This eliminates long plumbing lines and associated heat losses.
- In Solar water heaters leakages in the storage tanks are fairly common.
- Solar water heaters require long plumbing lines from the outdoor or rooftop installation to point of usage. These plumbing lines are prone to leakages and heat losses.

Intelligent and Automatic Features

- A. O. Smith Air2Heat water heater have intelligent and automatic features like timers. This switches on the unit automatically at the required time further minimizing heat losses.
- Solar water heaters typically do not have such features.

BETTER TECHNOLOGY, BETTER QUALITY, BETTER FEATURES

Wired Remote

- The A. O. Smith Air2Heat water heater comes with a wired remote.
- Users can access various settings through the remote control.
- Solar water heaters typically do not have remote control functions.

Intelligent Electronics

- A. O. Smith Air2Heat water heater uses a digital temperature controller which is highly reliable.
- A. O. Smith Air2Heat water heater have the electronic diagnostic features which help pinpoint problems like improper supply voltage, etc.
- Solar water heaters typically have mechanically operated thermostats and cut-outs which are less reliable and prone to false thermal cut-out tripping.
- Solar water heaters typically do not have diagnostic features.

Superior Quality

- The A. O. Smith Air2Heat water heater has superior, high quality Glass Lined tanks and Heat Exchanger.
- Solar water heaters typically have stainless steel tanks which are prone to rust and leakages.

Aesthetics

- The A. O. Smith Air2Heat water heater are designed and manufactured by A. O. Smith, North America's largest manufacturer of water heaters.
- Typical Solar water heaters are not very elegant and usually made by small and local manufacturers.

COMPARISON: ELECTRIC WATER HEATERS AND PAYBACK CALCULATORS

- The A. O. Smith Air2Heat water heater saves up to 60% on electricity costs compared to electric water heaters.
- Your savings on electricity cost will depend on usage and hours of operation. The table below would give you an idea of what a typical installation, which uses 60 and 80 litres of water daily, will save you.

PARTICULARS		COMPARED WITH HPW-60	COMPARED WITH HPW-80	
Hot Water Used Daily	Hot Water Used Daily [Litres]	60	80	
	Initial Water Temperature [°C]	2	20	
	Average Output Water Temperature [°C]	5	50	
A. O. Smith's Air2Heat Water Heater	Energy Consumption [kWh]	0.88	1.13	
	Cost in INR at Rs 5 per kWh	4.38	5.63	
Electrical Water Heater	Energy Consumption [kWh]	2.30	3.07	
	Cost in INR at Rs 5 per kWh	11.52	15.36	
Cost Savings [Rs]	Per Day	7	10	
	Per Month	214	292	
	Annually	2,608	3,553	