

North Road Technologies LLC

North Road Technologies AW100 Commercial/Industrial/Hospitality Heat Pump Water Heater

Introducing the AW100, the revolutionary commercial and industrial heat pump water heater from North Road Technologies (maker of the GEYSER residential heat pump water heater). The AW100 is the most efficient way to heat water for commercial and industrial applications, and it will save you an average of up to 50-70% of the required energy versus conventional or tankless water heaters.



How does the AW100 work?

Heat is pulled from the air surrounding the AW100, and utilizing advanced and scientifically engineered heat pump technology, that energy is used to heat the water in your tank. Even the small amount of electricity used to operate the AW100 is converted to heat!

Is the AW100 difficult to install or maintain?

The AW100 easily connects to an electric, oil, gas, or propane hot water tank. It is incredibly reliable, and it comes with a 1 year limited warranty.

How energy efficient is the AW100?

The AW100 has a COP ranging from 2.7-4.1, depending on the ambient air temperatures. This means it creates 3-4 units of renewable heat from the air for every 1 unit of electricity required to run the unit. This 300% to 400% efficiency compares with efficiencies of traditional water heaters of approximately 70% for gas or oil to 95% for electric water heaters. The AW100 provides the most environmentally-responsible way to heat your water.

How hot can I heat the water with the AW100?

The AW100 is unique in its ability to efficiently heat the water to 145° Fahrenheit (63°C) – suitable for hotels, hospitals, schools, restaurants, and other institutional applications where warmer water temperatures may be required by law.

What kinds of applications are suitable for the AW100?

Hotels/Motels, laundry facilities, hospitals, nursing homes, health care facilities, sports arenas, meeting facilities, schools, gyms, restaurants, commercial office or retail buildings, manufacturing facilities, and more.

Will my utility help to offset the initial cost for the AW100?

Probably! Many utilities offer incentives, credits, and rebates for the installation of energy efficient devices such as the AW100. Check with your local utility rebate programs for commercial or industrial applications.

Features:

- Highly efficient (up to 400%!), safe and reliable.
- 50%-70% energy savings over conventional heating sources.
- Fail safe design ensures hot water at all times.
- Engineered sizes available for almost any size need!
- Virtually maintenance free
- Dehumidifies and cools surrounding air – allowing return air to be ducted into office or warehouse spaces (cooling capacity similar to a 5-Ton Air Conditioner).
- Easy and safe installation, saving time
- Fast recovery and first hour hot water availability
- Vented heat exchanger to meet local and national codes

* Vented heat exchangers are required by UL and national/local codes to prevent the leakage of refrigerant into potable water supplies.

Note: Your AW100 requires an ambient air temperature greater than 40F and is most efficient when operated in an average ambient temperature between 45°F–110°F.

Unit Specifications:

- 100,000 BTU/hr (at 70°F Ambient Temperature).
- Default tank setting is 140°F (60° C).
- 158 gal/hr (598 Liters) recovery @ 140°F (60° C) tank temperature with 60°F (15.5° C) water supply and 70°F (21.1°C) ambient air.
- Adjustable from 90-145° F (32-63° C).
- Heats water up to 145°F (63° C).
- 220 Volt/60hz, single or 230/460/575 Volt/60Hz three phase.
- 80 Amp Circuit Required (Single Phase).
- Dimensions: 60" (138.6 cm) width x 44" (101.6 cm) height x 33" (76.2 cm) depth.
- Durable powder coated steel cabinet for years of trouble free service.
- Optional coated coils in salty/sea environments.
- ¾" Copper or PEX tubing required for connection from AW100 to tank (not supplied by NRT).

Heating Capacity						
Outside Air Temp		Output BTU/HR Rating (BTU/Hr)	COP	Efficiency	Capacity (Gallons Per Hour)	Capacity (Gallons Per Hour)
(°F)	(°C)				80° F Rise	65° F Rise
50	10	80,300	2.7	270%	122	151
60	15.6	95,100	3.2	320%	145	178
70	21.1	103,800	3.5	350%	158	195
80	26.7	123,300	4.1	410%	188	231

Figures based on 60 Degree F incoming water temperature