

ICE AIR 
All Climate Comfort™



HPWH Series

Cold Climate Heat Pump Water Heaters

HPWH

HPWH Series

Cold weather, your water heater, and lower operating costs.

There's a better way to provide domestic hot water, and that's via cold climate heat pump water heaters (HPWH). This technology offers an energy-efficient means of heating water without the use of fossil fuels.

Ice Air's engineering enables HPWH units to operate at very high coefficients of performance in hot temperatures. Even in extreme cold, HPWH units provide a higher efficiency than natural gas boilers and electric resistance tanks.



The HPWH Series complies with the NEEP Cold Climate Air Source Heat Pump (ccASHP) efficiency requirements. The Northeast Energy Efficiency Partnerships (NEEP) product listing identifies products best suited to electrify heating in cold climates.



The HPWH Series produce superior energy savings, which is especially important to satisfy the NYC Law 97 and other laws throughout the U.S., as well as helping projects comply with green building rating systems such as LEED®.



Rebates, incentives, and tax credits may be available through state, federal, and local utility programs.

For additional information scan the code → or visit: www.ice-air.com/rebates/



Ice Air's HPWH Series are tested to -13°F providing hot water even when it is extremely cold outside.



Ice Air HPWH Series Cold Climate Heat Pump Water Heaters are designed to provide domestic hot water to large buildings on the coldest days – allowing domestic hot water generation with zero emissions.

- **Defining Cold Climate**
- **Industry leading performance**
- **Lower cost of operation and maintenance compared to condensing gas-fired water heaters**
- **4x more efficient compared to electric resistance heaters**
- **Multiple independent circuits provide built-in redundancy**
- **Double wall heat exchangers ensure occupant safety**
- **Optional single wall heat exchangers (for glycol applications)**
- **Freeze protection standard**
- **Optional heat-trace powered by building emergency power**
- **Clean out ports to remove sediment or lime deposits**

SERIES MODEL #	ccHPWH275-D	ccHPWH550-D	ccHPWH275-S	ccHPWH550-S
Input Power	208-230V/3Ph/60Hz	208-230V/3Ph/60Hz	208-230V/3Ph/60Hz	208-230V/3Ph/60Hz
Refrigerant Circuits	2	4	2	4
Refrigerant / Quantity	R454b (30.8 Lbs / 15.4 Lbs per circuit)	R454b (61.7 Lbs / 15.4 Lbs per circuit)	R454b (30.8 Lbs / 15.4 Lbs per circuit)	R454b (61.7 Lbs / 15.4 Lbs per circuit)
Max H/W Temperature	140°F	140°F	140°F	140°F
Performance Specifications	Dry Bulb Temperature (68°F)	336,400	672,800	341,700
	Wet Bulb Temperature (59°F)			
	Inlet Water Temperature (59°F)			
	Outlet Water Temperature (140°F)			
	Heating Capacity (BTU/h)	336,400	672,800	341,700
	Input Power (kW)	22.9	45.9	22.3
	COP	4.3	4.3	4.5
	Dry Bulb Temperature (45°F)	271,700	543,400	275,900
	Wet Bulb Temperature (43°F)			
	Inlet Water Temperature (48°F)			
	Outlet Water Temperature (140°F)			
	Heating Capacity (BTU/h)	271,700	543,400	275,900
Input Power (kW)	23.4	46.8	22.8	
COP	3.4	3.4	3.55	
Dry Bulb Temperature (10°F)	176,100	352,100	178,800	
Wet Bulb Temperature (7°F)				
Inlet Water Temperature (43°F)				
Outlet Water Temperature (140°F)				
Heating Capacity (BTU/h)	176,100	352,100	178,800	
Input Power (kW)	24.0	48.0	23.3	
COP	2.15	2.15	2.25	
FLA (A)	105.3	210.7	105.3	
MCA (A)	125.9	251.8	125.9	
MOCP (A)	150	300	150	
Sound Level (dBA)	≤73	≤75	≤73	
Condenser Type	Double Wall BPX	Double Wall BPX	Single Wall BPX	
Water Data	Water Side Pressure Loss (PSIG)	24.3	24.5	24.3
	Rated Water Flow (GPM) (DB/WB:45°F/43°F, Inlet/outlet: 104°F/113°F)	78.3	145.2	78.3
	Single pass delta-T (F) (OA_temp=68°F, LWT=131°F)	11.10	11.10	11.20
	Piping Position	Rear	Rear	Rear
	Piping Sizes	2" (DN50)	3" (DN80)	2" (DN50)
Minimum Ambient Operating Temperature (°F)	-13	-13	-13	
Overall Dimensions [L x W x H] (inches)	81 x 39 x 89	95 x 51 x 89	81 x 39 x 89	
Net Weight (Lbs)	1,555	2,950	1,555	

Due to Ice Air's ongoing product development programs, the information in this document is subject to change without notice.

Electrified Product Family



* By making energy-saving upgrades today, you can give your building a head start on upcoming changes to city regulations such as NYC Law 97.

RSXC Series*

Cold Climate PTHPs give you the performance of a VRF system with the convenience of a PTAC. Using breakthrough cold climate technology allows Ice Air PTHPs to efficiently provide space heating down to -5°F and below.



iCool XC*

iCool XC heat pumps are compact, with advanced, two-stage dual heating capabilities (partial cold climate operation down to 23°F then supplemental electric heat resistance for increased output).



SPXC Series*

Cold Climate SPHPs are self-contained, concealed, ducted systems. This line of vertical packaged heat pumps serves multiple spaces through concealed ductwork to efficiently provide space heating to -5°F and below.



HPWH Series*

Air-Source Cold Climate Heat Pump Water Heaters capture the free energy in the environment and convert it to hot water. These units are certified to operate down to -13°F.



HPWH-SC Series*

Air-Source Cold Climate heat pump chiller heaters capture free energy in the environment to provide both hot and chilled water. These units are certified to operate down to -13°F.



VSHPGE Geothermal*

Ice Air's Geothermal WSHP is a versatile geothermal heat pump that is available in a range of sizes and configurations for convenient installation. Fully compatible with geothermal conditions, it provides an ideal solution for whisper quiet cooling and heating within a tight footprint.



Habitat Smart Technologies



The Habitat Thermostat's unique wireless mesh technology allows smart temperature control over the space it is monitoring. Transform a Fan Coil Unit into a state-of-the-art heating and cooling unit without opening walls to run wires.

Compatible with Nexus Home Automation Products **nexus** Equipment Management System™

Other Products

FCU

Fan Coil Units



This simple and easy cooling and heating solution provides reliable performance, high efficiency, ease of operation, low cost, easy installation, quiet comfort and a variety of solution-based options.

HWCAC

Hybrid Water-Cooled Air Conditioners



HWCACs provide hydronic heat without using the unit's compressor through an innovative system that combines high-efficiency cooling with a hot water coil.

WSHP

Water Source Heat Pumps



WSHPs provide efficient room-by-room comfort. Units function independently and are piped to a central water loop.

PTAC

Packaged Terminal Air Conditioners

PTACs are designed for ultra-high efficiency and comply with LEED® criteria in a durable, user-friendly package. Available for new construction, retrofit and ExactFit™ replacement applications.



NEW! Ice Air CEU Webinar

Learn more about the role HVAC electrification plays in building decarbonization today at iceairceu.com



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