

**ICEAIR**<sup>®</sup>  
All Climate Comfort<sup>™</sup>



## HPWH-SC Series

Heat Pump Water Chiller/Heater

# HPWH-SC Series

## Technology for Energy Savings and Sustainable Future

New advances in heat pump chiller/heater technology allow air-source equipment to extract the environment's energy down to very low ambient temperatures. By capturing energy in the environment and converting it to hot water using the refrigeration cycle, the Ice Air HPWH-SC Series provides a renewable, all-electric option that requires minimal energy consumption.

Ice Air's proven engineering enables the HPWH-SC Series units to operate at temperatures as low as -13°F, providing code compliant supply temperatures even when outside temperatures drop. The combination of efficiency and low energy consumption makes the HPWH-SC Series a valuable addition to high-rise buildings in cold weather climates.



The HPWH-SC 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-SC 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/](http://www.ice-air.com/rebates/)



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

Ice Air's heat pump water chiller/heaters convert free energy from the environment into hot water. These units are designed to provide hot water to large commercial buildings, even on cold days (-13°F).

- **Industry leading performance:**
  - **Lower operating/maintenance costs compared to condensing gas-fired water heaters**
  - **4x more efficient than electric resistance heaters**
- **Multiple independent circuits provide built-in redundancy**
- **Built-in heat exchangers**
- **Freeze protection standard**
- **Optional heat-trace powered by building emergency power**
- **Clean out ports to remove sediment or lime deposits**



SERIES MODEL #		ccHPWH275-S	ccHPWH550-S	
<b>Input Power</b>		208-230V/3Ph/60Hz	208-230V/3Ph/60Hz	
<b>Refrigerant Circuits</b>		2	4	
<b>Refrigerant / Quantity</b>		R454b (30.8 Lbs / 15.4 Lbs per circuit)	R454b (61.7 Lbs / 15.4 Lbs per circuit)	
<b>Performance Specifications</b>	<b>Max H/W Temperature</b>	140°F	140°F	
	<b>Dry Bulb Temperature (95°F)</b>	<b>Heating Capacity (BTU/h)</b>	224,100	410,400
		<b>Input Power (kW)</b>	17.9	33.8
		<b>COP</b>	3.63	3.54
	<b>Wet Bulb Temperature (43°F)</b>	<b>Heating Capacity (BTU/h)</b>	280,100	512,900
		<b>Input Power (kW)</b>	21.3	39.8
		<b>COP</b>	3.84	3.76
	<b>FLA (A)</b>	119.4	238	
	<b>MCA (A)</b>	133.3	251.9	
	<b>MOCP (A)</b>	175	300	
<b>Sound Level (dBA)</b>	≤71	≤76		
<b>Water Data</b>	<b>Condenser Type</b>	Single Wall Brazed Plate HXR	Single Wall Brazed Plate HXR	
	<b>Water Side Pressure Loss (PSIG)</b>	8.1	7.25	
	<b>Rated Water Flow (GPM) (DB/WB:45°F/43°F, Inlet/outlet: 104°F/113°F)</b>	73.4	129.6	
	<b>Max Working Pressure (PSIG)</b>	230	230	
	<b>Piping Position</b>	Rear	Rear	
	<b>Piping Sizes</b>	2" (DN50)	3" (DN80)	
<b>Minimum Ambient Operating Temperature (°F)</b>		-13	-13	
<b>Overall Dimensions [L x W x H] (inches)</b>		81 x 39 x 89	95 x 51 x 89	
<b>Net Weight (Lbs)</b>		1,500	2,850	

## 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.

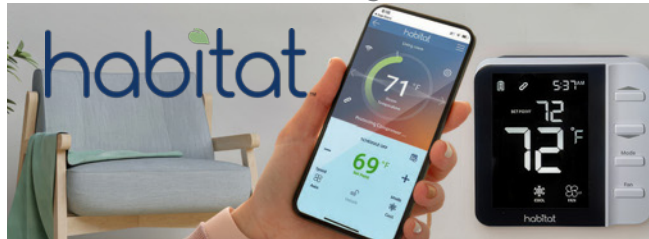


### VSHPGE Geothermal\*

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

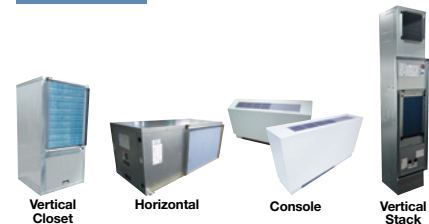
#### Hybrid Water-Cooled Air Conditioners



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](http://iceairceu.com)



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