



# **WSHP**

**VSHPGE** Vertical Stack Geothermal Units

**VSHPW** Vertical Stack Units

**CHPW** Console Units **HHPW** Horizontal Units

**VCHPW** Vertical Closet Units

Water Source Heat Pump Units

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AHRI Certified® is the trusted mark of performance for heating, air conditioning, water heating, and commercial refrigeration equipment. To find AHRI Certified products, go to www.ahridirectory.org.



# About Ice Air

Ice Air has over 50 years of industry experience in developing and manufacturing a wide variety of HVAC units to provide superior heating and cooling systems for new construction, retrofit and replacement installations. Ice Air offers advanced green technologies and provides world-class comfort at high efficiency levels, meeting environmental standards and promoting a healthy environment.

Ice Air's state-of-the-art units can be equipped with digital controls designed to optimize user comfort and ease of operation. Ice Air products are designed to provide years of trouble-free operation and reliable performance in multifamily housing, hotels/motels, dormitories, commercial buildings and similar projects. Units are ideal for new construction, retrofit and replacement applications.

# Overview

Quiet Comfort...Efficient Control...Flexible Design

Ice Air Water Source Heat Pump (WSHP) units combine reliable performance with high-efficiency cooling and heating operation.

Ice Air WSHPs utilize the highest quality materials and manufacturing practices in order to provide quiet comfort operation. Thermal and sound insulation, paired with precisely-sized air handling components deliver low sound levels while achieving optimum comfort. Work without distraction. Sleep without noise. Ice Air units create a comfortable environment so quiet it's almost undetectable.

Maintaining the highest quality product means Ice Air products meet all UL standards and conform to ASHRAE 90.1, local building codes and energy standards. All Ice Air products are ETL-listed for safety in the U.S. and Canada.

Every project is different with distinctive needs outside of providing comfort to the space. Ice Air WSHP units are available in a multitude of piping configurations with a wide variety of options and accessories to create a custom design tailored to the needs of the project.



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# **VSHPGE** Series



Ice Air's Vertical Stack Geothermal WSHP is a versatile geothermal heat pump that's available in a range of sizes and configurations for convenient installation. Fully compatible with geothermal conditions, Ice Air's Vertical Stack Geothermal WSHP offer high efficiencies — up to 21 EER in cooling on select models – and provide an ideal solution for whisper quiet cooling and heating within a tight footprint.

#### Features:

- Sustainable R32 Refrigerant
- Highest efficiency in market
- 17+ EER
- 3.6+ COP
- Advanced controls on every unit
- Industry best sound levels



SERIES MODEL #	8VSHPGE06-VRF	8VSHPGE12-VRF	8VSHPGE18-VRF	8VSHPGE24-VRF
Cooling Capacity (BTU/h)	8,800	15,200	18,200	24,000
Cooling Capacity Range (BTU/h)	7,200 - 10,700	11,000 - 17,300	16,900 - 26,400	23,600 - 36,500
Sensible Capacity (BTU/h)	6,900	11,700	15,100	19,700
Cooling EER	19.4	21.0	20.0	21.9
Heating Capacity (BTU/h)	5,900	9,400	13,800	18,700
Heating Capacity Range (BTU/h)	5,400 - 9,400	7,800 - 14,000	11,900 - 23,500	16,800 - 28,000
Heating COP	3.6	3.64	3.6	3.63
Flow Rate (GPM)	1.5	3.0	4.5	6.0
Airflow (CFM)	320	480	670	850

#### SPECIFICATION NOTES:

- 1. Cooling capacity BTUH rated @ 80.6°F DB, 66.2°F WB EAT; 77°F EWT @ 3 GPM/TON
- 2. Heating capacity BTUH rated @ 68°F DB, 59°F WB EAT; 32°F EWT @ 3 GPM/TON

Vertical Stack Water Source Heat Pump

# **VSHPW Series**



Ice Air's Vertical Stack WSHP units provide an ideal solution for whisper quiet cooling and heating within a tight footprint. With the lowest sound levels and smallest footprints available, our VS WSHPs offer superior value – efficiently heating and cooling with full thermal and acoustical insulation, advanced electronic control interface, high and low pressure protection, and condensate overflow sensors.

#### Features:

- Sustainable R32 Refrigerant
- High levels of energy efficiency
- 13+ EER
- Smallest footprint in the market
- Advanced controls on every unit
- Industry best sound levels



SERIES MODEL #	8VSHPW09	8VSHPW12	8VSHPW15	8VSHPW18	8VSHPW24	8VSHPW30	8VSHPW36
Cooling Capacity (BTU/h)	9,400	13,100	14,900	17,500	24,100	28,200	37,700
Sensible Capacity (BTU/h)	7,600	10,200	12,100	12,500	17,900	24,100	25,800
Cooling EER	14.4	15.3	14.8	14.4	13.8	14.2	13.5
Heating Capacity (BTU/h)	11,900	13,900	17,400	21,000	28,800	34,100	43,700
Heating COP	4.9	4.8	4.9	4.7	4.3	4.4	4.3
Flow Rate (GPM)	2.3	3.0	3.8	4.5	6.0	7.5	9.0
Airflow (CFM)	420	500	540	630	770	1000	1150

#### SPECIFICATION NOTES:

- 1. Cooling capacity BTUH rated @ 80.6°F DB, 66.2°F WB EAT; 86°F EWT @ 3 GPM/TON
- 2. Heating capacity BTUH rated @ 68°F DB, 59°F WB EAT; 68°F EWT @ 3 GPM/TON

# **CHPW Series**



Ice Air's Console Water Source
Heat Pumps provide independent
comfort cooling and heating within a
room and are often located against
walls or beneath windows of a room
to accommodate maximum load
requirements. These floor console
units offer superior performance and
are piped to a central water loop.

#### Features:

- Sustainable R32 Refrigerant
- 13+ EER
- High efficiency
- Digital controls designed to optimize user comfort and ease of operation
- Available for new construction and replacement applications
- Available with flat or slope top



SERIES MODEL #	5CHPW09	5CHPW13	8CHPW09	8CHPW13	8CHPW16	8CHPW19
Cooling Capacity (BTU/h)	9,800	12,000	9,900	12,300	16,400	17,400
Sensible Capacity (BTU/h)	8,900	10,200	8,600	10,200	13,200	13,800
Cooling EER	13.2	13.0	13.7	13.5	13.7	13.2
Heating Capacity (BTU/h)	11,600	15,400	12,200	15,600	20,900	22,500
Heating COP	4.5	4.3	4.9	4.5	4.5	4.3
Typical Airflow (CFM)	400	450	400	450	500	550

#### SPECIFICATION NOTES:

- 1. Cooling capacity BTUH rated @ 80.6°F DB, 66.2°F WB EAT; 86°F EWT @ 3 GPM/TON
- 2. Heating capacity BTUH rated @ 68°F DB, 59°F WB EAT; 68°F EWT @ 3 GPM/TON

Horizontal Water Source Heat Pump

# **HHPW Series**



Conserve floor space with Ice
Air's Horizontal WSHPs. Its Iow
profile design is unobtrusive with a
seamless appearance on the ceiling
– they are completely concealed
with an access panel control box.
Flexible control options, variable
air discharge outlets, and easy
service access provide superior
design and installation options. High
efficiency fan motors provide low
operating costs and reduced energy
consumption.

#### Features:

- Perfect for new construction or replacement projects
- Side or end-discharge can be field changed
- Rotary or scroll compressors
- Sustainable R32 Refrigerant
- 13.0+ EERs
- Advanced programmable controls
- Ultra-quiet



SERIES MODEL #	8HHPW09	8HHPW12	8HHPW15	8HHPW18	8HHPW24	8HHPW30	8HHPW36
Cooling Capacity (BTU/h)	10,600	12,200	19,600	21,100	26,900	30,200	36,400
Sensible Capacity (BTU/h)	8,000	9,100	14,700	16,200	19,900	23,800	26,900
Cooling EER	16.4	14.5	17.4	16.8	16.6	16.2	16.4
Heating Capacity (BTU/h)	12,500	15,400	21,300	23,500	30,100	34,800	43,600
Heating COP	5.3	4.9	5.6	5.2	5.0	5.2	5.3
Flow Rate (GPM)	2.3	3.0	3.8	4.5	6.0	7.5	9.0
Airflow (CFM)	300	400	500	600	800	1,000	1,200
WPD (PSI)	3.1	2.8	4.4	3.9	6.4	6.5	4.6

#### **SPECIFICATION NOTES:**

- 1. Cooling capacity BTUH rated @ 80.6°F DB, 66.2°F WB EAT; 86°F EWT @ 3 GPM/TON
- 2. Heating capacity BTUH rated @ 68°F DB, 59°F WB EAT, 68°F EWT @ 3 GPM/TON

Vertical "Closet" Water Source Heat Pump

# **VCHPW Series**



Designed to operate within an equipment closet, Ice Air's Vertical Closet WSHP provides a clean look within rooms as well as optimal installation and maintenance conditions. These quiet units feature high EERs, efficient motors and low-speed fan operation for low operating costs and reduced energy consumption.

#### Features:

- Sustainable R32 Refrigerant
- 13+ EER
- High efficiency
- Digital controls designed to optimize user comfort and ease of operation
- Available for new construction and replacement applications



SERIES MODEL #	8VCHPW09	8VCHPW12	8VCHPW15	8VCHPW18	8VCHPW24	8VCHPW30	8VCHPW36
Cooling Capacity (BTU/h)	10,600	12,200	19,600	21,100	26,900	30,200	36,400
Sensible Capacity (BTU/h)	7,800	8,900	14,300	15,400	19,700	22,000	26,600
Cooling EER	16.4	14.5	17.4	16.8	16.6	16.2	16.4
Heating Capacity (BTU/h)	12,500	15,400	21,300	23,500	30,100	34,800	43,600
Heating COP	5.3	4.9	5.6	5.2	5.0	5.2	5.3
Flow Rate (GPM)	2.3	3.0	3.8	4.5	6.0	7.5	9.0
Airflow (CFM)	300	400	500	600	800	1,000	1,200
WPD (PSI)	3.1	2.8	4.4	3.9	6.4	6.5	4.6

#### **SPECIFICATION NOTES:**

- 1. Cooling capacity BTUH rated @ 80.6°F DB, 66.2°F WB EAT; 86°F EWT @ 3 GPM/TON
- 2. Heating capacity BTUH rated @ 68°F DB, 59°F WB EAT; 68°F EWT @ 3 GPM/TON





#### **Motororized Valve**

The optional factory supplied motorized valve comes with a 2-way or 3-way valve body and a 2-position electric actuator. The actuator can be normally open or normally closed. When powered, the actuator moves to the desired position. When power is removed, the actuator returns to the normal position.



#### **Autoflow Valve**

The optional automatic balancing valve provides accurate flow control. Valves are factory set to a rated flow. Flow will automatically be controlled within a given tolerance of the set flow rate.



#### Strainer

The optional y-strainer collects and removes debris, extending coil lifetime and preventing damage to controls and heat transfer components. Optional blowdown valve allows for clean-out without removing mesh screen.



#### **Isolation Valve**

The optional isolation valve is a manual shutoff valve. Water flow is controlled by rotating the valve handle.



#### **Stainless Steel Hoses**

The optional stainless-steel hoses comes with swivel connections for union of chassis and risers. Two hoses are provided per unit for connection of supply and return lines.



#### **Purge Valve**

Purge valves facilitate the removal of excess or unwanted liquids/gases within a piping system, storage tank, or other container.



Ice Air's thermostats for its lines of PTACs, WSHPs, Fan Coils, SPACs and Hybrid Water-Cooled ACs are designed for ease-of-use and efficiency. Unit-mounted controls are standard (accessible through an attractive brushed aluminum control door). Optional wall-mounted remote controls are available.



#### **Habitat Wireless Thermostat**

- Attractive, user-friendly design
- Wireless or wired connection
- Mobile app provides full control from anywhere, anytime
- Wi-Fi enabled for Smart App control options
- Works with Alexa or Google Assistant





#### Programmable Digital **Touchscreen Thermostat**

- Streamlined touchscreen display
- Intuitive design makes configuration fast and easy



## **Programmable Digital** LCD Thermostat

- Easy-to-read digital display
- Compact, attractive design
- User-friendly for quick configuration



## Non-Programmable LCD **Digital Touch Pad Thermostat**

- Touchpad interface controls basic functions
- Designed for simple operation



## Non-Programmable LED Digital Touch Pad Thermostat

- Touchpad interface controls basic functions
- Designed for simple operation



for FCVE/FCVC only

### Manual Temperature and Fan Speed Dial Thermostat

- Straightforward design for controlling basic
- Allows for easy thermostatic contro



for PTAC/PTHP only

### Manual Temperature and Mode Dial Thermostat

- Designed for Packaged Terminal Units
- Simple to operate

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

· Provides basic control functions



Whether driven by corporate policy or local greenhouse gas emission legislation, the movement to reduce carbon dioxide emissions – also known as decarbonization – is gaining momentum. As building owners explore ways to reduce reliance on fossil fuels and meet increasingly stringent environmental requirements, **building electrification** has emerged as a proven strategy for reducing emissions while increasing efficiency and lowering operating costs. Building electrification is the process of replacing existing technologies that rely on fossil fuels - such as space heating systems - with newer technologies such as heat pumps that use electricity as the energy source for both heating and cooling.

Numerous states around the U.S. - including California, New York, Washington DC, and others – have adopted regulatory policies aimed at reducing greenhouse gas emissions. Such regulations stress the role of electrification in decarbonizing the built environment and have wide-ranging implications for utilities, building engineers and architects, OEMs and building owners.

As an established HVAC original equipment manufacturer, Ice Air has been ahead of the of building electrification and decarbonization movement for decades. We're proud to leading the way and usher in a better tomorrow with innovative, reliable and efficient systems - all designed to help building owners make the transition to a greener, efficient and sustainable future.

# **Electrified Product Family**





Packaged Terminal Heat Pump



**SPXC** 





Geothermal Vertical Stack Heat Pump





# **Electrified Product Family**



By making energy-saving upgrades today, you can give vour 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.

### Cool 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 heal 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.



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.









New technologies like Variable Refrigerant Flow (VRF) are on the move. There is no denying the benefits of VRF any longer, and with Ice Air VRF, these benefits are delivered simply and effectively.



Wall Mounted

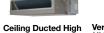












Other Products



#### **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 highefficiency cooling with a hot water coil.



#### Water Source **Heat Pumps**

Static Pressure



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



#### **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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