

# Panasonic



## Inverter Heat Pump and Air Handler System

Comfort  
Enhancement  
Made Easy for  
Every Home



# Standard Features



- Up to 18.4 SEER2
- Available in 1.5-5 ton models
- Superior low ambient heat output: 100% output down to  $-20^{\circ}\text{C}$  ( $-4^{\circ}\text{F}$ ) with COP up to 2.0, continuous operation as cold as  $-30^{\circ}\text{C}$  ( $-22^{\circ}\text{F}$ ) (1)
- User customizable set point for heat pump to auxiliary heat change over temperatures
- Reduced replacement installation cost by using existing refrigerant lines and control wiring (2)
- Advanced inverter control
- Intelligent diagnostics and adaptive control system

(1) Model dependent

(2) Refer to the installation manual for details on compatibility requirements



- Multi position (up/down/left/right)
- ECM up to 0.8 in. wc; stand pressure up to 1.0 in. wc
- Compatible with both 24V and 485 communication modes
- Aluminum evaporator coil
- Optional auxiliary heat kit up to 25kW
- Quiet Operation – inverter system running at significantly lower dB level

# Core Features

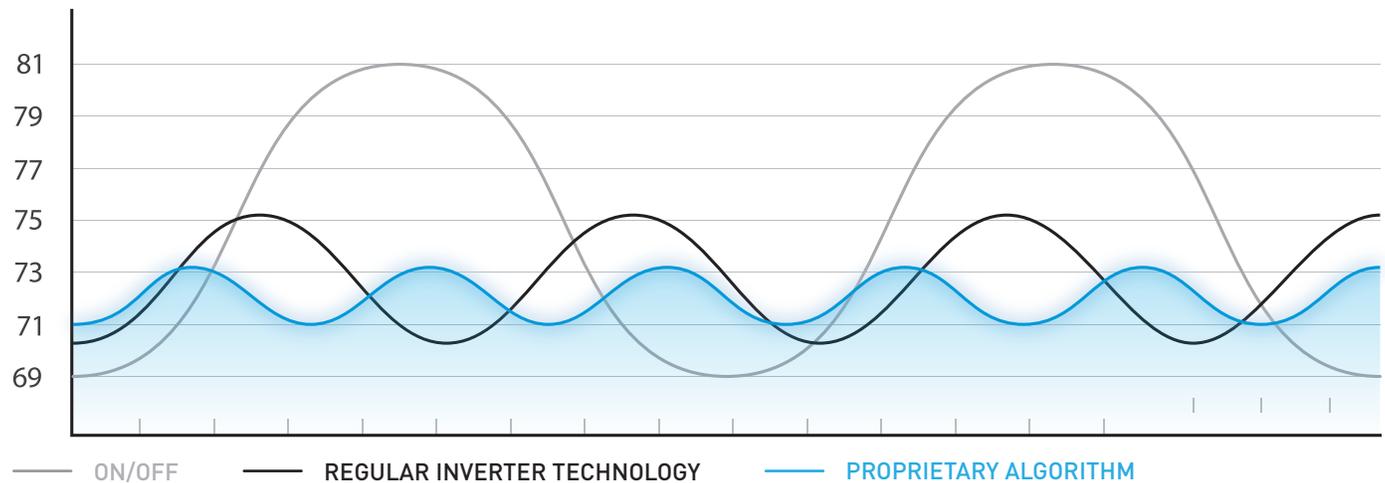
## Panasonic Inverter Heat Pump

### ADVANCED INVERTER CONTROL

#### Minimal Indoor Temperature Fluctuation



Set Temperature: 22°C (72°F)



Proprietary algorithms enable a more precise analysis of indoor temperature variations and an optimization of the compressor in advance to reduce the temperature fluctuation. This means that compared to standard inverter technology, this advanced inverter technology provides more accurate temperature control, providing a consistent, and comfortable environment.



**FLASH  
COOLING/HEATING**



**ULTRA STABLE ROOM  
COMFORT**



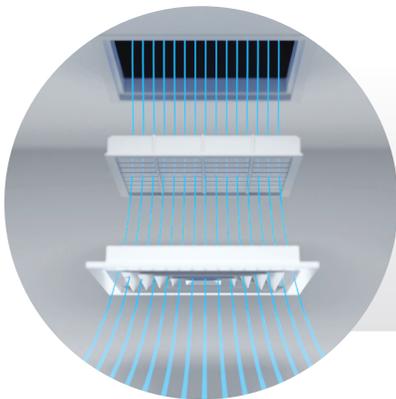
**LOWER  
OPERATING COST**

# Core Features

## Panasonic Air Handling Unit

### COMPUTATIONAL CONSTANT AIRFLOW

Computational Constant Airflow with an advanced algorithm automatically measures static pressure issues caused by blocked coils, dirty filters, kinks in ducts, etc. The ECM motor reacts to these conditions, adjusting the output power and fan speeds to ensure optimized airflow.



### CONSTANT AIRFLOW

The Panasonic air handler is capable of ensuring optimal airflow even when the air passes through a high-density MERV13 filter.



#### CONVENIENT INSTALLATION

Constant CFM can adapt to the existing ductwork design, this enables the installer to be free from complicated manual air balance testing.



#### OPTIMAL COMFORT

Constant CFM can adapt to the pressure changes inside the ductwork as the system operates, guaranteeing constant and optimal airflow moving through the system.



#### HIGHER EFFICIENCY

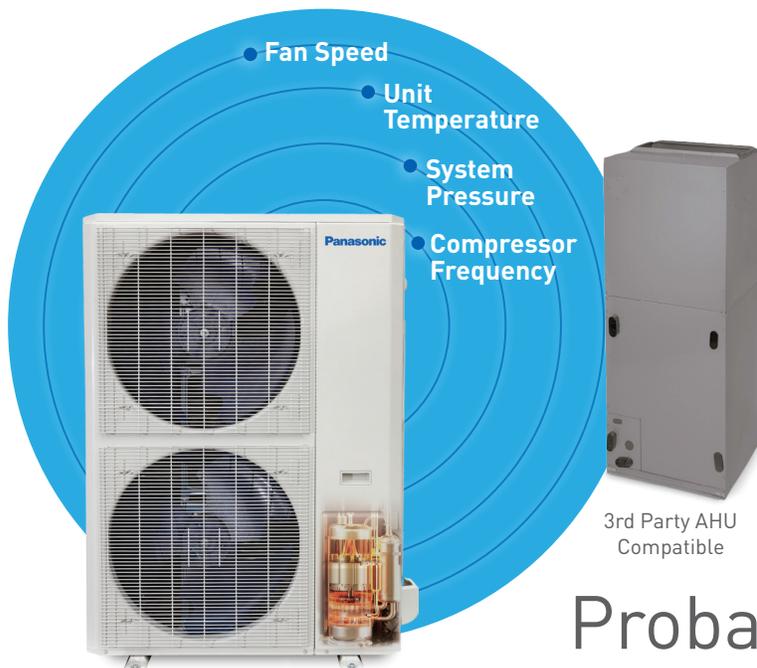
By delivering the right amount of airflow the system can effectively reduce energy waste due to excess airflow.

# Exclusive **BI-COMM** Technology

## Compatible with **485 & 24V**

### COMMUNICATION MODE

The Panasonic heat pump unit is able to precisely receive and process signals from the communicating air handler to manage the air temperature and airflow inside a home and maintain them at the most comfortable level.



### SELF-ADAPT MODE

The Panasonic inverter heat pump has the ability to analyze the temperature and pressure change of the unit to adjust system operation. When matching the heat pump to existing equipment, even non-communicating, the system can function effectively as a communicating inverter combination so that homeowners can enjoy the benefits of inverter technology.

## Probably the **Most Flexible** Heating Upgrade Solution Ever

The Panasonic system can flexibly mix and match with most other brand indoor units, outdoor units, and thermostats, even without changing electrical wiring or refrigerant lines.



# Real Inverter Benefits For All

## Inverter Heat Pump Condenser



### UP TO 30% ENERGY SAVING

High efficiency Inverter compressor that ensures both energy saving & comfort.



### QUIET OPERATION

As low as 59 dBA with a 1.5 ton inverter heat pump.

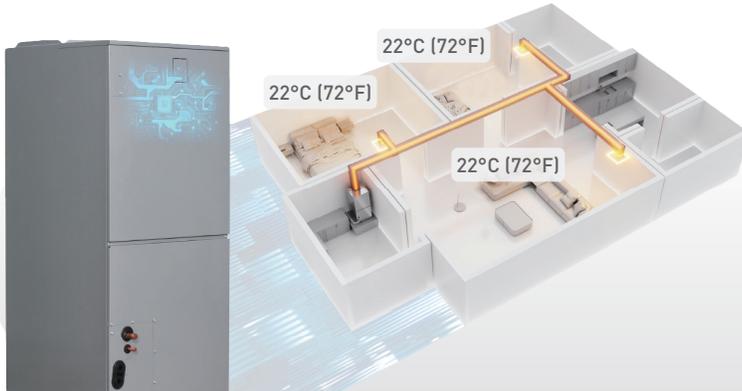


### FAST HEATING AND COOLING

Faster comfort with our advanced compressor activation technology.



# Enjoy Optimal Comfort with the full system set



**ULTRA STABLE ROOM  
TEMPERATURE**

## OPTIMAL AIRFLOW DELIVERY

Computational Constant Airflow.



### Adaptable Heating Combination

#### Combo heat

Auxiliary heat kits available to offer the best heating combination and balance between rapid heating and energy-savings.



### Quiet Operation

#### Inverter technology

As low as 35 dBA with a 1.5 ton air handling unit;  
As low as 59 dBA with a 1.5 ton inverter heat pump.



### Easy Control

#### Wi-fi Control & Dual Control

Easily control the system through simple APP controls or voice commands;  
Compatible with two wired controllers for convenient control on different floors.

# Ingenious Flexibility

There is a solution for  
**any climate condition**

## 100%

**HEATING OUTPUT**  
down to  $-20^{\circ}\text{C}$  ( $-4^{\circ}\text{F}$ )  
with COP up to 2.0

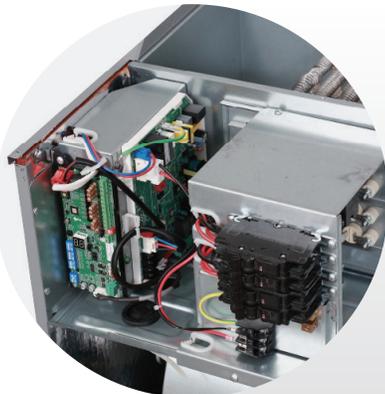
## $-30^{\circ}\text{C}$ ( $-22^{\circ}\text{F}$ )

**CONTINUOUS OPERATION**  
as Cold as  $-30^{\circ}\text{C}$  ( $-22^{\circ}\text{F}$ )



## Extreme Heat Pump

Panasonic Extreme Heat Pumps are able to deliver 100% heating output at  $-15^{\circ}\text{C}$  ( $5^{\circ}\text{F}$ ), ensuring uninterrupted warmth for moderate winters. For areas that experience extreme cold, Panasonic offers a top-notch solution. The Panasonic Extreme condenser unit is capable of delivering 100% or more heating output down to  $-20^{\circ}\text{C}$  ( $-4^{\circ}\text{F}$ ), also offering superior heating performance down to  $-30^{\circ}\text{C}$  ( $-22^{\circ}\text{F}$ ), outdoor temperatures.



## Auxiliary Heat Kit Combinations

Auxiliary heat kits can be added to the heat pump system, so both the fast and intense heat from the electric heater, and the efficient and stable heat generated by the heat pump can be offered. Programmable control enables customized heat pump to electric heat switch over temperatures, that means customers can choose the best heating combination for the climate they live in.

# Compact Size Fits Any Space

Thinner design and lighter weight provides unmatched flexibility to fit in any unique home space.



BACKYARD



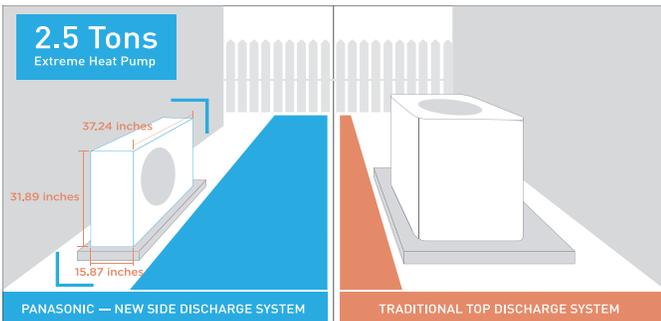
PATIO



ROOF/TERRACE/BALCONY



ZERO LOT LINE



- Fit more in your tech van or truck; 4-5 units as opposed to 1 or 2 traditional.
- Easy to bring to the installation site and install on pad – the single fan unit can be transported by a single worker.

## Easy to Install & Maintain



**Multi-Position Air Handler**  
Vertical or horizontal flexible installation.



**Slide-Out Fan**  
Easily take out the fan motor for maintenance.



**Magnetic Filter Cover**  
1 Click to replace the standard filter.



**Easy-Access**  
Just remove 2 screws for access to the electrical board, blower and heater.



**Intelligent Diagnostics**  
Easily accessible error code display.



# Panasonic Extreme Heat Pump



Model	Indoor Unit		CS-HE18YAHK6	CS-HE24YAHK6	CS-HE30YAHK6	CS-HE36YAHK6	CS-HE48YAHK6	CS-HE60YAHK6
	Outdoor Unit		CU-HE18YAHK6	CU-HE24YAHK6	CU-HE30YAHK6	CU-HE36YAHK6	CU-HE48YAHK6	CU-HE55YAHK6
<b>Performance</b>								
<b>Power Supply</b>		V.Ph,Hz	208/230, 1,60	208/230, 1,60	208/230, 1,60	208/230, 1,60	208/230, 1, 60	208/230, 1, 60
<b>SEER2</b> <small>(AHRI 210/240-2023)</small>	Cooling/Heating Capacity	Btu/h	18000/19000	24000/24000	30000/33000	36000/40000	47000/50000	55000/59000
	SEER2	Btu/w	18.0	17.4	16.2	16	15.6	15.3
	EER2	Btu/w	12.4	11.7	9.8	9.8	8.2	8.8
	HSPF2 Region 4/5	Btu/w	9.3/7.6	10.0/8.0	8.9/7.0	9.5/7.8	9.4/7.7	9.4/7.6
<b>Heating at 5°F (-15°C)</b>	Rated Capacity	Btu/h	16500	22600	24000	34400	46000	48500
	COP	W/W	2.04	1.91	1.77	1.97	1.9	1.91
<b>Indoor Unit</b>								
<b>Air Flow Volume</b>	H/M/L	CFM	576/529/488	758/694/629	894/805/711	1082/970/864	1282/1094/905	1582/1358/1135
<b>Noise Level</b>	H/M/L	dB(A)	36/34/32	43/40.5/35	43/40/30.5	46.8/44/41.3	53/50/46	52.5/49/44
<b>Net Dimension</b>	WxDxH	mm	534x445x1143	534x445x1143	534x534x1245	534x534x1245	534x534x1245	534x622x1346
	WxDxH	inch	21.02x17.52x45.00	21.02x17.52x45.00	21.02x21.02x49.02	21.02x21.02x49.02	21.02x21.02x49.02	21.02x24.49x52.99
<b>Packing Dimension</b>	WxDxH	mm	640x530x1280	640x530x1280	640x620x1380	640x620x1380	640x620x1380	640x705x1480
	WxDxH	inch	25.20x20.87x50.39	25.20x20.87x50.39	25.20x24.41x54.33	25.20x24.41x54.33	25.20x24.41x54.33	25.20x27.76x58.27
<b>Net/Gross Weight</b>		kg	48/58.7	47.9/57.8	58.6/70.6	58.6/70.6	58.6/70.6	58.6/70.6
		lbs	105.82/129.41	105.60/127.43	129.19/155.64	129.19/155.64	129.19/155.64	129.19/155.64
<b>Stuffing Quantity</b>								
<b>Stuffing Quantity</b>	20'/40'/40'HQ	Indoor Unit	39/82/154	39/82/154	27/57/57	27/57/57	27/57/57	27/54/54

# Panasonic Regular Heat Pump



Model	Indoor Unit		CS-HE18YAHK6	CS-HE24YAHK6	CS-HE30YAHK6	CS-HE36YAHK6	CS-HE48YAHK6	CS-HE60YAHK6
	Outdoor Unit		CU-E18YAHK6	CU-E24YAHK6	CU-E30YAHK6	CU-E36YAHK6	CU-E48YAHK6	CU-E60YAHK6
<b>Performance</b>								
<b>Power Supply</b>		V.Ph,Hz	208/230, 1,60	208/230, 1,60	208/230, 1,60	208/230, 1,60	208/230, 1, 60	208/230, 1, 60
<b>SEER2</b> <small>(AHRI 210/240-2023)</small>	Cooling/Heating Capacity	Btu/h	18000/19000	24000/24000	30000/33000	36000/40000	47000/50000	55000/59000
	SEER2	Btu/w	17	17	17.3	16.9	15.8	14.7
	EER2	Btu/w	10.9	10.5	10.6	10.1	8.8	8.8
	HSPF2 Region 4/5	Btu/w	8.8/6.9	9.2/7.6	8.5/6.6	8.2/6.1	9.4/7.5	8.5/6.7
<b>Heating at 5°F (-15°C)</b>	Rated Capacity	Btu/h	11000	19400	17800	20500	36000	34600
	COP	W/W	2.0	2.1	1.7	1.9	1.95	1.9
<b>Indoor Unit</b>								
<b>Air Flow Volume</b>	H/M/L	CFM	576/529/488	758/694/629	894/805/711	1082/970/864	1282/1094/905	1582/1358/1135
<b>Noise Level</b>	H/M/L	dB(A)	36/34/32	43/40.5/35	43/40/30.5	46.8/44/41.3	53/50/46	52.5/49/44
<b>Net Dimension</b>	WxDxH	mm	534x445x1143	534x445x1143	534x534x1245	534x534x1245	534x534x1245	534x622x1346
	WxDxH	inch	21.02x17.52x45.00	21.02x17.52x45.00	21.02x21.02x49.02	21.02x21.02x49.02	21.02x21.02x49.02	21.02x24.49x52.99
<b>Packing Dimension</b>	WxDxH	mm	640x530x1280	640x530x1280	640x620x1380	640x620x1380	640x620x1380	640x705x1480
	WxDxH	inch	25.20x20.87x50.39	25.20x20.87x50.39	25.20x24.41x54.33	25.20x24.41x54.33	25.20x24.41x54.33	25.20x27.76x58.27
<b>Net/Gross Weight</b>		kg	48/58.7	47.9/57.8	58.6/70.6	58.6/70.6	59.2/70.9	73.8/86.5
		lbs	105.82/129.41	105.60/127.43	129.19/155.64	129.19/155.64	130.51/156.31	162.70/190.70
<b>Stuffing Quantity</b>								
<b>Stuffing Quantity</b>	20'/40'/40'HQ	Indoor Unit	39/82/154	39/82/154	27/57/57	27/57/57	27/57/57	27/54/54

# Panasonic Air Handling Unit



Series			18K	24K	30K	36K	48K	60K
Panasonic Indoor Unit Model			CS-HE18YAHK6	CS-HE24YAHK6	CS-HE30YAHK6	CS-HE36YAHK6	CS-HE48YAHK6	CS-HE60YAHK6
Power Supply	Rated	V.Ph,Hz	208/230, 1, 60	208/230, 1, 60	208/230, 1, 60	208/230, 1, 60	208/230, 1, 60	208/230, 1, 60
Indoor Air Flow (Hi/Mi/Lo)		CFM	576.47/529.41/488.24	758.82/694.12/629.41	894.12/805.88/711.76	1082.35/970.59/864.71	1282.35/1094.12/905.88	1582.35/1358.82/1135.29
Indoor Noise Level (Hi/Mi/Lo)		dB(A)	36/34/32	43/40.5/35	43/40/30.5	46.8/44/41.3	53/50/46	52.5/49/44
External Static Pressure (ESP)	Range	In. wc.	0-0.8	0-0.8	0-0.8	0-0.8	0-0.8	0-0.8
Throttle Type		Btu/w	EEV for Cooling	EEV for Cooling	EEV for Cooling	EEV for Cooling	EEV for Cooling	EEV for Cooling
Indoor Unit	Dimension (WxDxH)	inch	21.02x17.52x45.00	21.02x17.52x45.00	21.02x21.02x49.02	21.02x21.02x49.02	21.02x21.02x49.02	21.02x24.49x52.99
	Packing (WxDxH)	inch	25.20x20.87x50.39	25.20x20.87x50.39	25.20x24.41x54.33	25.20x24.41x54.33	25.20x24.41x54.33	25.20x27.76x58.27
	Net/Gross Weight	lbs	105.82/129.41	105.60/127.43	129.19/155.64	129.19/155.64	130.51/156.31	162.70/190.70
Refrigerant Piping	Liquid Side/Gas Side	inch	3/8" / 3/4"	3/8" / 3/4"	3/8" / 3/4"	3/8" / 3/4"	3/8" / 3/4"	3/8" / 7/8"
Drainage Water Pipe Diameter		inch	3/4	3/4	3/4	3/4	3/4	3/4
Communication Protocol Between IDU and ODU			RS485+24V	RS485+24V	RS485+24V	RS485+24V	RS485+24V	RS485+24V
Thermostat Type	Wireless Remote Controller		Standard	Standard	Standard	Standard	Standard	Standard
	Programmable Wired Controller		Standard	Standard	Standard	Standard	Standard	Standard
	WiFi		Optional	Optional	Optional	Optional	Optional	Optional
Qty. per 20'/40'/40'/ HQ	Indoor Unit		39/82/154	39/82/154	27/57/57	27/57/57	27/57/57	27/57/57

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