Panasonic

Central Heat Pump Systems

All-Electric Central Heat Pump Air Handler Systems

INTERIOS™

Regular Heat Series | Extreme Heat Series

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.

Refrigerant

Environmentally Friendly Refrigerant

R454B Refrigerant

R454B refrigerant is an excellent heat transfer medium which leads to greater energy and cost-effectiveness. It also has low global warming potential, hence it's friendlier to the environment.

Has **HIGHER COOLING CAPACITY** so increases heat transfer efficiency.

Consumes **LESS ENERGY**, helping you to **SAVE ON ELECTRICITY COSTS**.

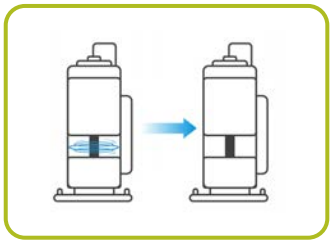
Has **ZERO IMPACT** on the ozone layer, so it is **ENVIRONMENTALLY FRIENDLY**.

Refrigerant Leak Detection

Refrigerant Leak Detection System for AHU

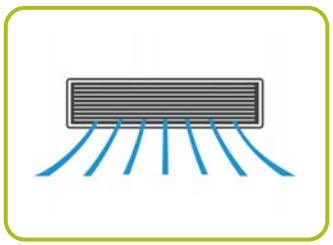
To protect your family and the system.

If a leak happens



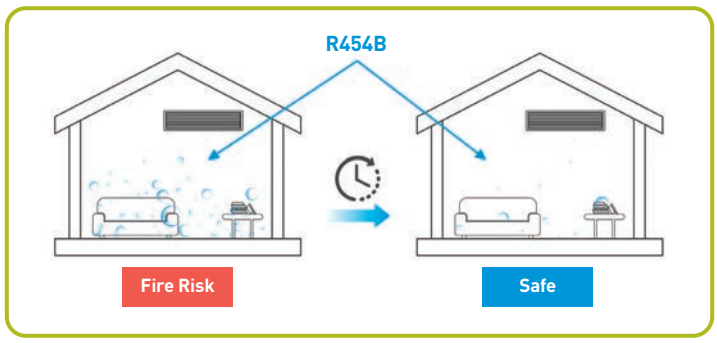
Automatic Shutoff

The system will stop the compressor operation of the outdoor unit to prevent the refrigerant from flowing into the indoor space continuously.

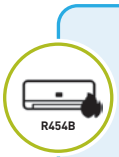


Continuous fan mode of Indoor Unit

The indoor fan will run continuously to deliver indoor airflow.



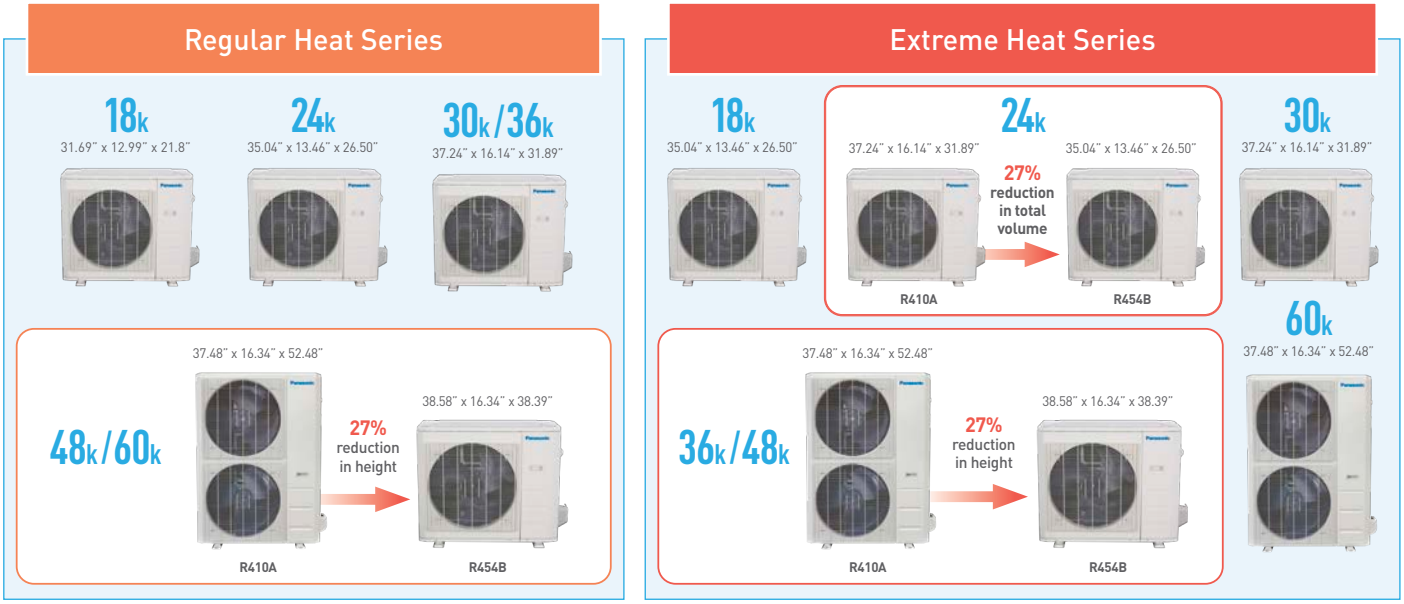
As a result, the total amount of R454B refrigerant in the indoor space will be reduced to a safety level.



GG.9 Charge limits for appliances using A2L refrigerants connected via an air duct system to one or more rooms and when the charge amount exceed M1 need to comply with GG.9.2&GG.9.3. This is the reason why we need add a refrigerant sensor.

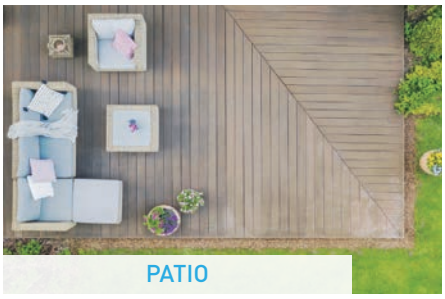
Flexible Installation Options

Reduce Size, **More Flexible Installation**

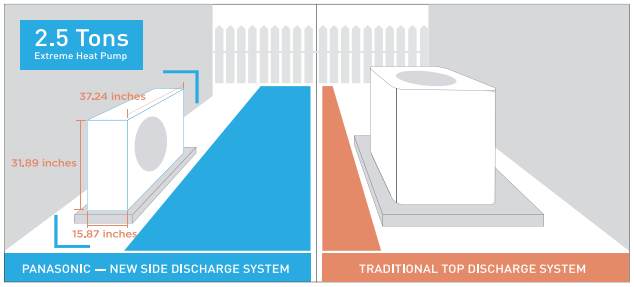


Compact Size **Fits Any Space**

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



- 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.



Multi-Position Air Handler

Vertical or horizontal flexible installation.

Easier Installation and Service

Your Evolving System

Remote Upgrade & Self-Diagnosis Capability

OTA

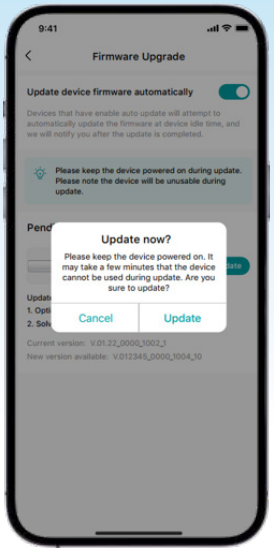
Remotely upgrade your systems with the latest software updates

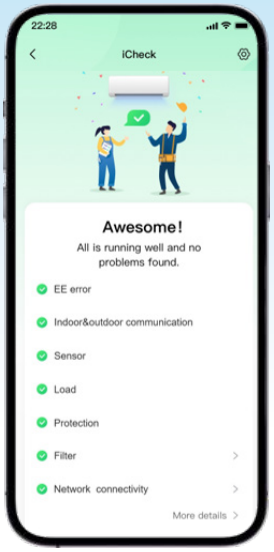
For Homeowners

Be ready for the future, it's easy to update with new feature enhancements, as they become available.

For Contractors

Easy mass unit maintenance and upgrades.





iCheck

It's like a doctors appointment for your HVAC, so that you can check your system's health at home.

For Homeowners

Identify issues before calling for service.

For Contractors

Diagnose the issues faster. Save maintenance time.

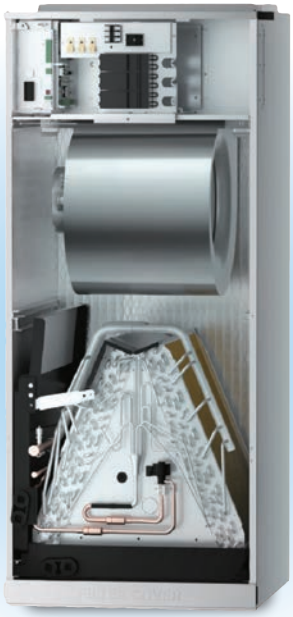
Indoor Unit Features

Slide-Out Fan

Easily take out the fan motor for maintenance.

Magnetic Filter Cover

1 Click to replace the standard filter.



Easy-Access

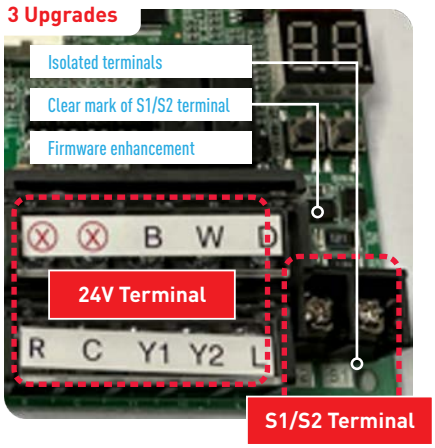
Just remove 2 screws for access to the electrical board, blower and heater.

Intelligent Diagnostics

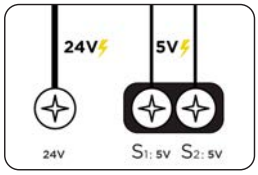
Easily accessible error code display.

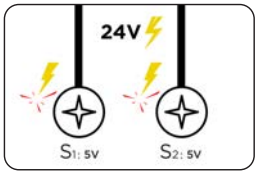
Outdoor Unit Features

Easy-to-Connect 24V Connection Board



R454B Connection Board
24V & S1/S2 terminal put separately



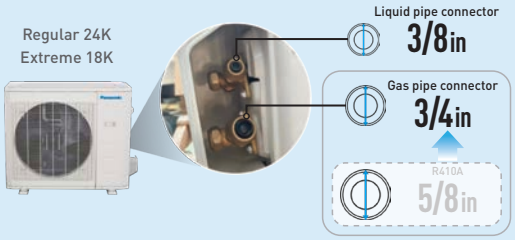


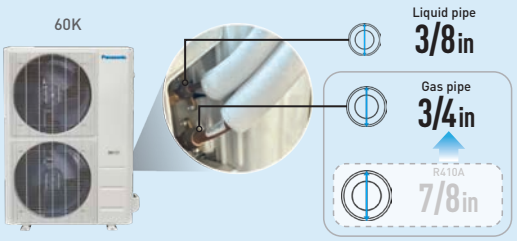
Easy connection
The 24V & S1/S2 terminal are put separately in the new connection board, so it's easier for the installers to find the right terminals.

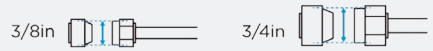
No burnout when misconnection
The firmware is also upgraded for the new board, so the board will not burn out even when the communication wires are misconnected.

Unified Connection Pipes and Valves for 24V Heat Pump

Easier and lower cost installation







Pipe diameters = Connector diameters

The connectors of the stop valves of the gas pipe and liquid pipe are separately unified to 3/8 in and 3/4 in which are the same as the diameters of the gas pipe and liquid pipe, so there's no need for a flare-to-flare adaptor.

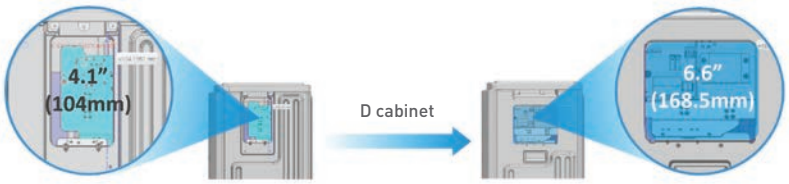
Aligned with Industry standard sizes

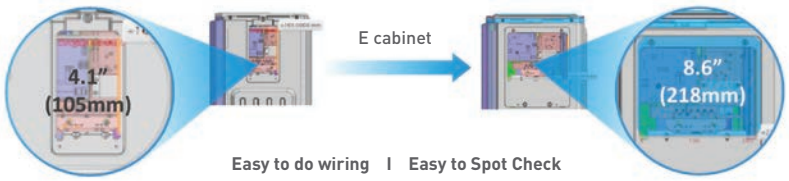
With a smaller diameter, it's easier for the installer to bend the gas pipe when they are handling the pipe connection.

The industry standard size pipes are easier to source and helps to reduce the pipe inventory required by installers.

Enlarged Access Panel

Significantly larger access panel for installation and service





Easy to do wiring I Easy to Spot Check

Cold Climate Capabilities

There is a solution for
any climate condition

100%

HEATING OUTPUT
down to -20°C (-4°F)

-30°C (-22°F)

CONTINUOUS OPERATION
as Cold as -30°C (-22°F)

Extreme Heat Pump

Panasonic Extreme Heat Pumps are able to deliver 100% heating output at -15°C (5°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°C (-4°F), also offering superior heating performance down to -30°C (-22°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.

Other Core Features

Real Inverter Benefits For All

FLASH COOLING/HEATING

ULTRA STABLE ROOM COMFORT

LOWER OPERATING COST

Inverter Heat Pump Condenser

UP TO 30% ENERGY SAVING

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

QUIET OPERATION

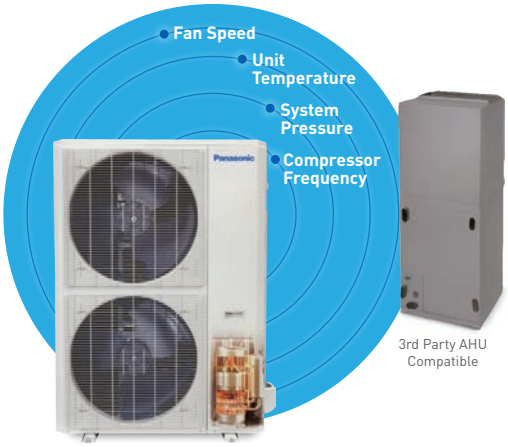
As low as 59 dBA with a 1.5 ton inverter heat pump.

FAST HEATING AND COOLING

Faster comfort with our advanced compressor activation technology.

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.

Regular Heat Series

	SERIES		18K			24K			30K			36K			48K			60K		
MODEL	INDOOR UNIT		CS-HM18BAHU			CS-HM24BAHU			CS-HM30BAHU			CS-HM36BAHU			CS-HM48BAHU			CS-HM60BAHU		
	OUTDOOR UNIT		CU-M18BAHU			CU-M24BAHU			CU-M30BAHU			CU-M36BAHU			CU-M48BAHU			CU-M60BAHU		
Power Supply	INDOOR UNIT	V, Phase, Hz	115/208/230V, 1PH, 60Hz			115/208/230V, 1PH, 60Hz			115/208/230V, 1PH, 60Hz			115/208/230V, 1PH, 60Hz			115/208/230V, 1PH, 60Hz			115/208/230V, 1PH, 60Hz		
	OUTDOOR UNIT	V, Phase, Hz	208/230V, 1PH, 60Hz			208/230V, 1PH, 60Hz			208/230V, 1PH, 60Hz			208/230V, 1PH, 60Hz			208/230V, 1PH, 60Hz			208/230V, 1PH, 60Hz		
			MIN	RATED	MAX	MIN	RATED	MAX	MIN	RATED	MAX	MIN	RATED	MAX	MIN	RATED	MAX	MIN	RATED	MAX
Cooling	Capacity	Btu/h	5350	18000	20000	7200	24000	27000	10400	30000	34000	8300	36000	38900	16600	48000	49900	21000	54000	55000
	Input Power	W	400	1635	1900	530	2181	2870	735	2778	3230	710	3600	4500	1400	4800	5350	1800	6200	6410
Heating	Capacity	Btu/h	5600	18000	19000	7100	26000	30000	6400	31000	32000	6700	36000	41300	15300	48000	49500	26000	54000	55000
	Input Power	W	340	1675	1650	440	2396	2730	455	2595	2550	460	3100	3550	1025	4085	4650	975	4650	4810
Noise	Indoor	dB-A (H/M/L)	43	41	33	44	42	28	46	42	29	48	45	28	53	50	44	52	49	34.5
	Outdoor	dB-A (H)	55			60			60			63			65			65		
EER2			11.0			11.0			10.7			10.0			10.0			8.6		
SEER2			18.8			18.1			17.0			16.1			16.0			15.2		
COP			3.15			3.18			3.50			3.40			3.45			3.37		
HSPF2	Region IV		9.1			9.7			8.5			8.7			8.5			8.4		
HSPF2	Region V		7.0			7.7			6.6			7.0			7.2			6.8		
Min Circuit Ampacity	Indoor	A (115V / 208/230V)	5.5 / 4.0			5.5 / 4.0			8.0 / 6.0			8.0 / 6.0			14.5 / 11.0			14.5 / 11.0		
	Outdoor	A	16.0			19.0			22.5			24.0			36.0			39.0		
Max Fuse	Indoor	A	15			15			15			15			15			15		
	Outdoor	A	20			20			25			30			40			40		
Fan Motor RLA	Indoor	A	2.0			3.0			4.5			4.5			7.8			8.3		
	Outdoor	A	0.8			1.0			1.1			1.5			2.0			1.2		
Air Flow	Indoor	CFM (Turbo/H/M/L)	618	577	530	489	824	759	695	630	989	895	806	712	1189	1083	971	865	1601	1472	1283	1095	1807	1583	1360	1136
	Outdoor	CFM	1451			1766			3002			2413			3037			3037		
Operation Condition	Cooling	Indoor	16°C to 32°C / 60°F to 90°F																	
		Outdoor	-25°C to 50°C / -13°F to 122°F																	
	Heating	Indoor	0°C to 30°C / 32°F to 86°F																	
		Outdoor	-25°C to 24°C / -13°F to 75°F																	
Refrigerant Type			R454B			R454B			R454B			R454B			R454B			R454B		
Refrigerant Amount		oz	51.15			74.08			91.71			116.40			134.04			134.04		
Refrigerant Piping	Diameter	in (Liquid/Gas)	3/8 / 3/4			3/8 / 3/4			3/8 / 3/4			3/8 / 3/4			3/8 / 3/4			3/8 / 3/4		
	Max Length	ft	98.4			164			164			246			246			246		
Indoor & Outdoor Unit Height Difference		ft	65.6			82			82			98.4			98.4			98.4		
Additional Gas Amount		oz/ft	0.7			0.7			0.7			0.7			0.7			0.7		
Unit Dimensions	Indoor	in (W/D/H)	21.02	17.52	45.00	21.02	17.52	45.00	21.02	21.02	49.02	21.02	21.02	49.02	21.02	24.49	52.99	21.02	24.49	52.99
	Outdoor	in (W/D/H)	31.69	12.99	21.81	35.04	13.46	26.50	37.24	16.14	31.89	37.24	16.14	31.89	38.58	16.34	38.39	38.58	16.34	38.39
Unit Weight	Indoor	lb	105.82			105.60			128.97			129.41			162.92			162.92		
	Outdoor	lb	77.16			102.29			141.76			153.22			192.90			192.90		
Carton Dimensions	Indoor	in (W/D/H)	26.57	20.87	48.62	26.57	20.87	48.62	26.57	24.41	52.56	26.57	24.41	52.56	27.95	26.77	56.50	27.95	26.77	56.50
	Outdoor	in (W/D/H)	36.02	14.57	24.21	39.17	15.67	29.13	42.91	19.68	34.84	42.91	19.68	34.84	45.08	19.68	42.52	45.08	19.68	42.52
Carton Weight	Indoor	lb	126.76			127.43			153.44			153.88			190.92			190.92		
	Outdoor	lb	83.77			109.13			152.34			163.58			224.21			224.21		

Extreme Heat Series

	SERIES		18K			24K			30K			36K			48K			60K		
MODEL	INDOOR UNIT		CS-HM18BAHU			CS-HM24BAHU			CS-HM30BAHU			CS-HM36BAHU			CS-HM48BAHU			CS-HM60BAHU		
	OUTDOOR UNIT		CU-HM18BAHU			CU-HM24BAHU			CU-HM30BAHU			CU-HM36BAHU			CU-HM48BAHU			CU-HM55BAHU		
Power Supply	INDOOR UNIT	V, Phase, Hz	115/208/230V, 1PH, 60Hz			115/208/230V, 1PH, 60Hz			115/208/230V, 1PH, 60Hz			115/208/230V, 1PH, 60Hz			115/208/230V, 1PH, 60Hz			115/208/230V, 1PH, 60Hz		
	OUTDOOR UNIT	V, Phase, Hz	208/230V, 1PH, 60Hz			208/230V, 1PH, 60Hz			208/230V, 1PH, 60Hz			208/230V, 1PH, 60Hz			208/230V, 1PH, 60Hz			208/230V, 1PH, 60Hz		
			MIN	RATED	MAX	MIN	RATED	MAX	MIN	RATED	MAX	MIN	RATED	MAX	MIN	RATED	MAX	MIN	RATED	MAX
Cooling	Capacity	Btu/h	5600	18000	22000	7200	23000	27000	12800	30000	39000	9700	36000	42000	15600	48000	51000	11400	54000	56300
	Input Power	W	440	1445	1950	530	1965	2870	850	2567	3620	820	3076	4440	1345	4690	5180	1540	5400	6430
Heating	Capacity	Btu/h	6000	19000	22000	7100	24000	30000	10300	34000	38500	11000	37000	48000	15500	50000	57300	8100	56000	64500
	Input Power	W	500	1740	1950	440	2112	2730	655	2790	3020	665	3012	4370	1045	4750	5200	725	5300	5970
Noise	Indoor	dB-A (H/M/L)	41	39	33	44	42	28	46	43	27.5	48	45.5	25.5	52	50	34	52	49.5	34.5
	Outdoor	dB-A (H)	59			60			60.5			62.5			65			65		
EER2			12.5			11.7			11.7			11.7			10.5			10.0		
SEER2			19.0			18.3			16.8			17.4			16.5			16.0		
COP			3.20			3.33			3.65			3.60			3.40			3.10		
HSPF2	Region IV		9.7			10.0			10.0			10.2			9.5			9.0		
HSPF2	Region V		8.0			8.0			8.3			8.6			8.0			8.0		
Min Circuit Ampacity	Indoor	A (115V / 208/230V)	5.5 / 4.0			5.5 / 4.0			8.0 / 6.0			8.0 / 6.0			14.5 / 11.0			14.5 / 11.0		
	Outdoor	A	16.0			19.0			29.5			29.0			38.0			40.0		
Max Fuse	Indoor	A	15			15			15			15			15			15		
	Outdoor	A	20			20			30			30			40			40		
Fan Motor RLA	Indoor	A	2.0			3.0			4.5			4.5			7.8			8.3		
	Outdoor	A	0.9			1.0			1.5			2.4			2.0			1.2		
Air Flow	Indoor	CFM (Turbo/H/M/L)	618	577	530	489	824	759	695	630	989	895	806	712	1189	1083	971	865	1601	1472	1283	1095	1807	1583	1360	1136
	Outdoor	CFM	1766			1766			3002			3002			3037			2649		
Operation Condition	Cooling	Indoor	16°C to 32°C / 60°F to 90°F																	
		Outdoor	-30°C to 50°C / -22°F to 122°F																	
	Heating	Indoor	0°C to 30°C / 32°F to 86°F																	
		Outdoor	-30°C to 24°C / -22°F to 75°F																	
Refrigerant Type			R454B			R454B			R454B			R454B			R454B			R454B		
Refrigerant Amount		oz	74.08			74.08			105.82			126.99			134.04			183.42		
Refrigerant Piping	Diameter	in (Liquid/Gas)	3/8 / 3/4			3/8 / 3/4			3/8 / 3/4			3/8 / 3/4			3/8 / 3/4			3/8 / 3/4		
	Max Length	ft	98.4			164			164			246			246			246		
Indoor & Outdoor Unit Height Difference		ft	65.6			82.0			82.0			98.4			98.4			98.4		
Additional Gas Amount		oz/ft	0.7			0.7			0.7			0.7			0.7			0.7		
Unit Dimensions	Indoor	in (W/D/H)	21.02	17.52	45.00	21.02	17.52	45.00	21.02	21.02	49.02	21.02	21.02	49.02	21.02	24.49	52.99	21.02	24.49	52.99
	Outdoor	in (W/D/H)	35.04	13.46	26.50	35.04	13.46	26.50	37.24	16.14	31.89	38.58	16.34	38.39	38.58	16.34	38.39	37.48	16.34	52.48
Unit Weight	Indoor	lb	105.82			105.60			128.97			129.41			162.92			162.92		
	Outdoor	lb	101.40			102.29			164.02			204.15			201.06			242.95		
Carton Dimensions	Indoor	in (W/D/H)	26.57	20.87	48.62	26.57	20.87	48.62	26.57	24.41	52.56	26.57	24.41	52.56	27.95	26.77	56.50	27.95	26.77	56.50
	Outdoor	in (W/D/H)	39.17	15.67	29.13	39.17	15.67	29.13	42.91	19.68	34.84	45.08	19.68	42.52	45.08	19.68	42.52	43.11	19.49	58.27
Carton Weight	Indoor	lb	126.76			127.43			153.44			153.88			190.92			190.92		
	Outdoor	lb	109.13			109.13			174.60			235.23			232.36			275.13		

breathe **well**

The Only Complete Air Quality Solution™

Panasonic

Clean Comfort Fresh

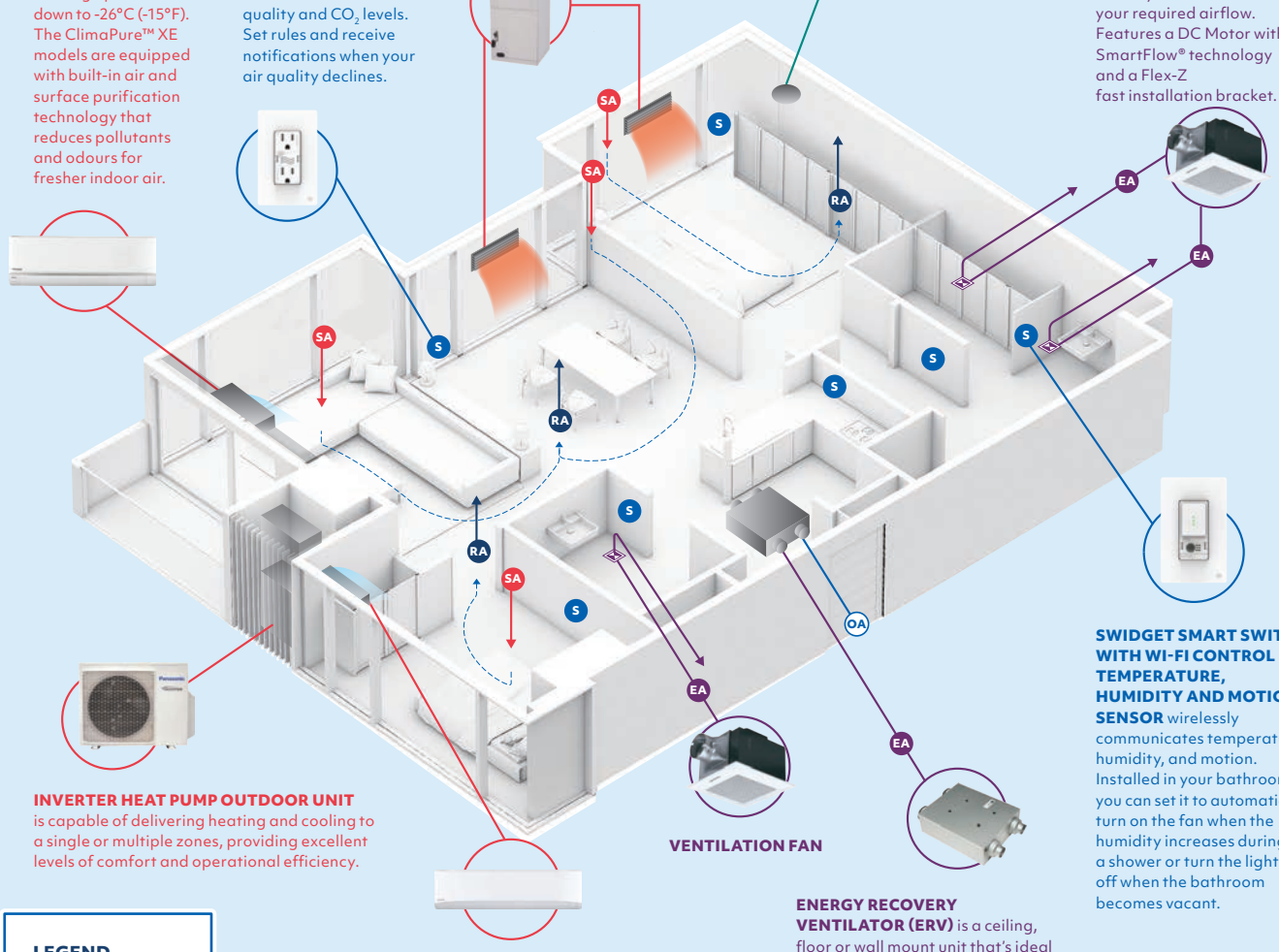
WHISPERAIR REPAIR®
Ceiling Mount nanoe™ X Generator inhibits contaminants with silent operation. With a compact design, it deodorizes air and hydrates skin and hair.

INTERIOS™ CENTRAL HEAT PUMPS are centrally ducted, whole-home heating and cooling systems available in all-electric and hybrid-heating models. Cold Climate capabilities allow these systems to heat down to -30°C (-22°F). The Air Handling Unit adapts to existing ductwork design and intelligently monitors pressure changes inside the ductwork to ensure constant and optimal airflow.

SWIDGET SMART OUTLET WITH WI-FI CONTROL + AIR QUALITY SENSOR wirelessly communicates temperature, humidity, air pressure and total volatile organic compounds which are used to calculate air quality and CO_2 levels. Set rules and receive notifications when your air quality declines.

COLD CLIMATE WALL-MOUNTED HEAT PUMP offers low ambient heating operation down to -26°C (-15°F). The ClimaPure™ XE models are equipped with built-in air and surface purification technology that reduces pollutants and odours for fresher indoor air.

VENTILATION FAN with built-in Pick-A-Flow® speed selector switch allows you to select your required airflow. Features a DC Motor with SmartFlow® technology and a Flex-Z fast installation bracket.



SWIDGET SMART SWITCH WITH WI-FI CONTROL + TEMPERATURE, HUMIDITY AND MOTION SENSOR wirelessly communicates temperature, humidity, and motion. Installed in your bathroom you can set it to automatically turn on the fan when the humidity increases during a shower or turn the lights off when the bathroom becomes vacant.

INVERTER HEAT PUMP OUTDOOR UNIT is capable of delivering heating and cooling to a single or multiple zones, providing excellent levels of comfort and operational efficiency.

VENTILATION FAN

ENERGY RECOVERY VENTILATOR (ERV) is a ceiling, floor or wall mount unit that's ideal for meeting your ventilation needs. The multi-speed selector provides customizable supply and exhaust airflow to create balanced, positive or negative pressure within your space.

MULTI-ZONE WALL-MOUNTED A/C allows you to control the temperature independently in multiple areas around the home, providing optimal year-round comfort along with the reduced energy consumption.

LEGEND

- OA Outside Air
- EA Exhaust Air
- SA Supply Air
- RA Return Air
- S Swidget Smart Controls

learn more!