

Wrap Yourself in Comfort and Quiet  
Eco-conscious Technologies from Japan

Full Product Line Catalogue

**2016**

Addendum

2<sup>nd</sup> Edition

for a greener tomorrow



# P

SERIES



# PLA SERIES

PLA-SP71/100/125/140

A complete line-up including deluxe units that offer added energy savings. The incorporation of wide air-outlet and the "i-see Sensor" enhances airflow distribution control, achieving an enhanced level of comfort throughout the room. The synergy of higher energy efficiency and more comfortable room environment results in the utmost user satisfaction.

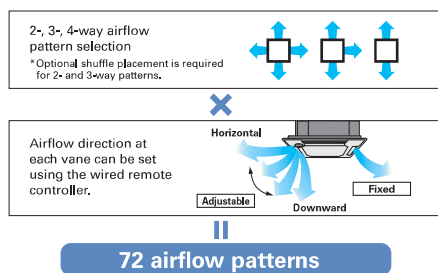


## Optimum Airflow

### Individual Vane Settings

Optimum airflow settings provide maximum comfort throughout the room.

In addition to the selection of variable airflow patterns (i.e., 2-, 3- or 4-way), this function allows the independent selection of vertical airflow levels for each vane, thereby maintaining a comfortable room environment with even temperature distribution.



### Wide Airflow

Wide-angle outlets distribute airflow to all corners of the room.

The outlets are larger than those of previous models and the shape has been improved for better wide-angle ventilation.

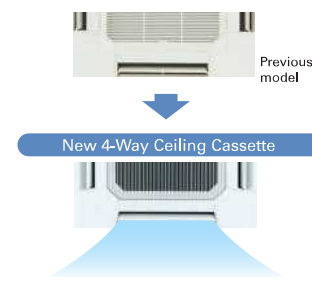
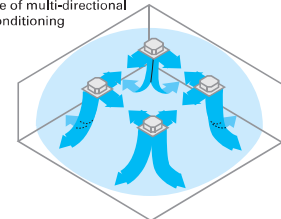


Image of multi-directional air conditioning



### Individual Vane Setting + Wide Airflow

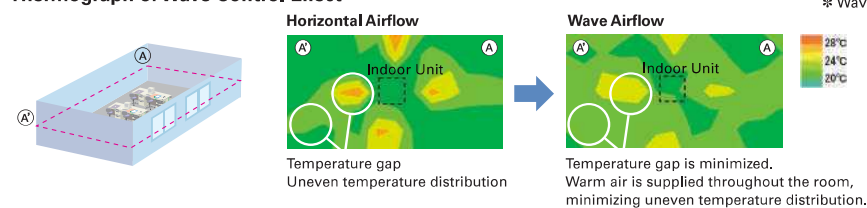
The combination of individual vane setting, which enables the optimal outlet setting for each room layout, and the wide airflow function works to ensure even temperature distribution throughout each room. The result is uniformly comfortable air conditioning.

## Wave Airflow – Thoroughly warming all corners of the room!

### Wave Airflow Operation

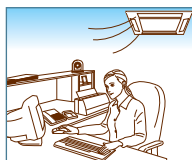
"Wave Airflow" is essentially the advanced control of the vanes directing the airflow from the unit. Blown-air is repeatedly dispersed from the unit in horizontal and downward directions at time-lagged intervals to provide uniform heating throughout the room.

### Thermograph of Wave Control Effect



## Horizontal Airflow

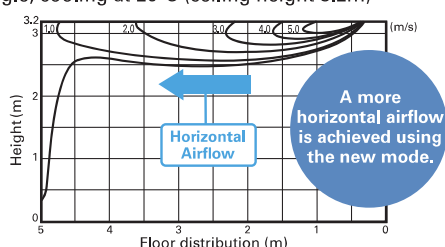
A "Horizontal Airflow" function has been added to reduce drafty-feeling distribution. Horizontal Airflow prevents cold drafts from striking the body directly, thereby keeping the body from becoming over-chilled.



### [Airflow Distribution]

PLA-SP125BA

Flow angle, cooling at 20°C (ceiling height 3.2m)



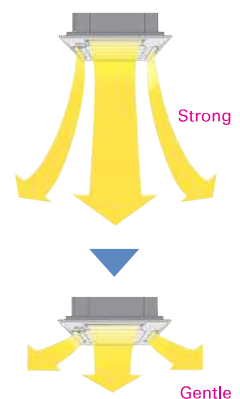
\* Smudge spots on the ceiling may form where the airflow is not evenly distributed.

## Automatic Air-speed Adjustment

An automatic air-speed mode that adjusts airflow speed automatically is adopted to maintain comfortable room conditions at all times. This setting automatically adjusts the air-speed to conditions that match the room environment.

At the start of heating/cooling operation, the airflow is set to high-speed to quickly heat/cool the room.

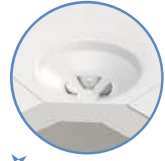
When the room temperature reaches the desired setting, the airflow speed is decreased automatically for stable comfortable heating/cooling operation.



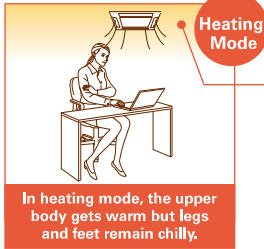


# DOES HAVING COLD FEET BOTHER YOU?

The "i-see Sensor" is the answer to your problems!



**i-see Sensor**

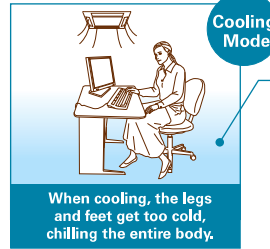


**Heating Mode**

Warm air rises to the ceiling!

Even though the temperature on the remote controller is at a preset temperature, the temperature at floor level remains cold. As a result, there's no feeling of getting warmer.

In heating mode, the upper body gets warm but legs and feet remain chilly.



**Cooling Mode**

Legs and feet feel cold!

At the beginning of operation, the room is nice and cool; but before long the temperature at floor level drops, causing the feeling of being too cold.

When cooling, the legs and feet get too cold, chilling the entire body.

## "i-see Sensor" temperature-sensing technology improves energy efficiency and enhances room comfort

The "i-see Sensor" is an innovative Mitsubishi Electric technology that uses a radiation-based sensor to monitor temperature throughout an entire room. When connected to the air conditioner control panel, i-see Sensor works to maximize room comfort.

### ■ i-see Sensor Panel



PLP-6BALME

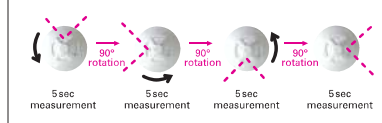
### ■ Corner Panel Only (Option)



PAC-SA1 ME-E

### ■ i-see Sensor Operation

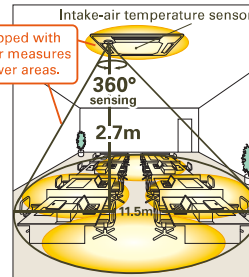
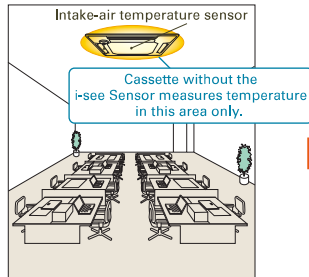
The i-see Sensor rotates 90° at intervals of 5 sec, accurately measuring the temperature throughout the room (covering entire floor space).



## A comfortable room environment cannot be maintained by monitoring only the temperature at the ceiling.

### Without "i-see Sensor"

Only intake-air temperature at the ceiling was measured, tending to overlook uneven temperature distribution at floor level.



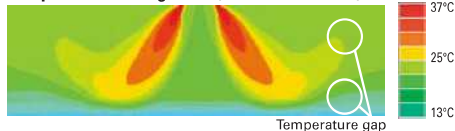
### Equipped with 4-Way Ceiling "i-see Sensor"

Both the floor temperature and intake-air temperature are measured to provide operation that creates a comfortable room environment from ceiling to floor.

### In Heating Mode

### When you want the temperature felt to be 20°C

#### Temperature setting: 20°C (w/o i-see Sensor)

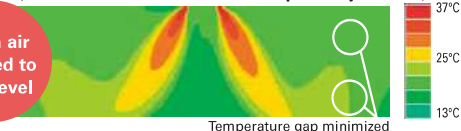


Temperature felt: 17°C (floor level 14°C)

Warm air rises to the ceiling. This causes poor heating at floor level, leaving legs and feet feeling cold.

#### Temperature setting: 20°C (w/ i-see Sensor + Automatic Air-speed Adjustment)

Room air warmed to floor level



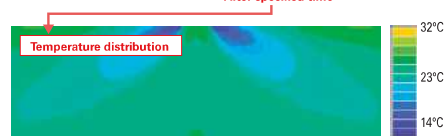
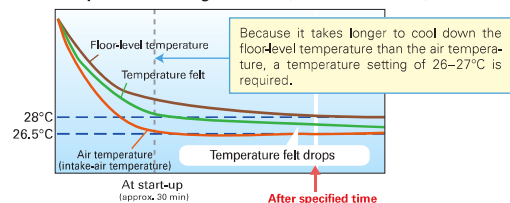
Temperature felt: 20°C (floor level 20°C)

The i-see Sensor detects the temperature at the floor while the Automatic Air-speed Adjustment eliminates uneven temperature distribution by thoroughly warming the air down to the floor.

### In Cooling Mode

### When you want the temperature felt to be 28°C

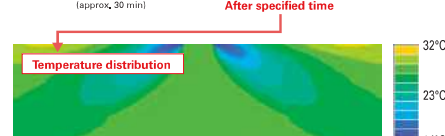
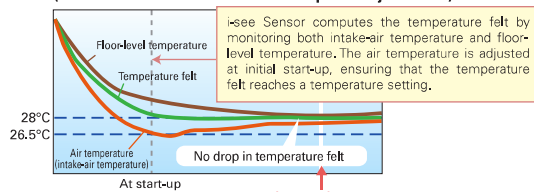
#### Temperature setting: 26~27°C (w/o i-see Sensor)



Temperature felt: 26.5°C

The temperature felt drops according to the drop in floor-level temperature. If the floor-level temperature is not monitored during long cooling operation, the temperature felt becomes chilly.

#### Temperature setting: 28°C (w/ i-see Sensor + Automatic Air-speed Adjustment)



Temperature Felt: 28°C

Air temperature is adjusted according to the floor temperature to keep the temperature felt at 28°C.

Comfortable without excess chilliness



## PLA SERIES

## SERIES SELECTION

### Indoor Unit



PLA-SP71/100/125/140

### Outdoor Unit



SUZ-SA71VA2  
SUZ-SA100VA



PUHZ-SP100YHA



PUHZ-SP125/140VHA/YHA

### Optional

PLP-6BA - Panel only  
PLP-6BALM - Panel with wireless remote controller  
PLP-6BALME - Panel with i-see Sensor + wireless remote controller



PAR-31MAA  
DELUXE



PAC-YT52CRA



PAR-SL97A-E

## PLA SERIES

Type				Inverter Heat Pump				
Indoor Unit				PLA-SP71BA	PLA-SP100BA	PLA-SP100BA	PLA-SP125BA	PLA-SP140BA
Outdoor Unit				SUZ-SA71VA2	SUZ-SA100VA	PUHZ-SP100YHA	PUHZ-SP125VHA (YHA)	PUHZ-SP140VHA (YHA)
Refrigerant				R410A(*1)				
Power Supply	Source			Outdoor power supply				
	Outdoor ( V / Phase / Hz )			V: 230 / Single / 50 / (Y: 400/Three/50)				
Cooling	Capacity	Rated	kW	7,1	9,4	9,4	12,3	13,0
		Min-Max	kW	3,2 - 8,1	5,0 - 9,9	4,9 - 9,9	5,5 - 13,0	5,5 - 14,0
	Total Input	Rated	kW	2,22	3,12	3,12	4,08	4,98
	EER			3,20	3,01	3,01	3,01	2,61
	Design load		kW	7,1	9,4	9,4	-	-
	Annual electricity consumption *2		kWh/a	387	610	522	-	-
	SEER			5,6	5,1	5,1	-	-
	Energy efficiency class			A+	A	A	-	-
Heating (Average Season)	Capacity	Rated	kW	8,0	11,2	11,2	13,5	15,5
		Min-Max	kW	3,5 - 8,9	5,1 - 11,5	4,5 - 11,5	5,0 - 15,0	5,0 - 17,0
	Total Input	Rated	kW	2,49	3,48	3,49	3,96	4,83
	COP			3,21	3,21	3,21	3,41	3,21
	Design load		kW	5,8	8,0	8,0	-	-
	Declared Capacity	at reference design temperature	kW	4,7 (-10℃)	5,9 (-10℃)	6,3 (-10℃)	-	-
		at bivalent temperature	kW	5,2 (-7℃)	7,1 (-7℃)	7,1 (-7℃)	-	-
		at operation limit temperature	kW	4,7 (-10℃)	5,9 (-10℃)	5,0 (-15℃)	-	-
	Back up heating capacity		kW	1,1	2,1	1,7	-	-
	Annual electricity consumption *2		kWh/a	1521	2800	2511	-	-
	SCOP			3,9	3,8	3,8	-	-
	Energy efficiency class			A	A	A	-	-
Operating Current (Max)			A	16,6	28,9	13,9	29 (14)	30,5 (14)
Indoor Unit	Input	Rated	kW	0,07		0,14	0,15	0,15
		Operating Current(Max)	A	0,51		0,94	1,00	1,00
	Dimensions		HxWxD	mm		258-840-840 <35-950-950>		
	Weight		kg	23 <6>		25 <6>		
	Air Volume (Lo-Mi2-Mi1-Hi)		m³/min	14-16-18-21		20-23-26-30		
	Sound Level (SPL) (Lo-Mi2-Mi1-Hi)		dB(A)	28-30-32-34		32-34-37-40		
	Sound Level (PWL)		dB(A)	58		62		
	Dimensions		HxWxD	mm		298-840-840 <35-950-950>		
Outdoor Unit	Dimensions		HxWxD	mm		880 - 840 - 330		
	Weight		kg	52		56		
	Air Volume	Cooling	m³/min	58,2		57,1		
		Heating	m³/min	49,2		54,6		
	Sound Level (SPL)	Cooling	dB(A)	55		55		
		Heating	dB(A)	55		54		
	Sound Level (PWL)	Cooling	dB(A)	65		70		
		Heating	dB(A)	65		70		
	Operating Current (Max)		A	16,1		28 (13)		
	Breaker Size		A	20		16		
Ext. Piping	Diameter	Liquid/Gas	mm	9,52 / 15,88		9,52 / 15,88		9,52 / 15,88
	Max.Length	Out-In	m	30		30		40
	Max.Height	Out-In	m	30		30		30
Guaranteed Operating Range (Outdoor)	Cooling	°C	-10 ~ +43		-10 ~ +46		-15 ~ +46	-15 ~ +46
		°C	-10 ~ +24		-10 ~ +21		-15 ~ +21	-15 ~ +21

\*1 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO<sub>2</sub>, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.

\*2 Energy consumption based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.

# PEAD SERIES

PEAD-SP71/100/125/140JA(L)

The thin, ceiling-concealed indoor units of this series are the perfect answer for the air conditioning needs of buildings with minimum ceiling installation space and wide-ranging external static pressure. Energy-saving efficiency has been improved, reducing electricity consumption and contributing to a further reduction in operating cost.



## Compact Indoor Units

The height of the models from 35-140 has been unified to 250 mm. Compared to the previous PEAD-EA model, the height has been reduced by as much as 75 mm (models 100-140), making installation in low ceilings with minimal clearance space possible.



Reduction of  
**75mm**  
(models 100-140)  
compared to PEAD-EA

## External Static Pressure

External static pressure conversion can be set up to five stages. Capable of being set to a maximum of 150 Pa, units are applicable to a wide range of building types.

■ External static pressure setting

Series	71	100	125	140
PEAD-SP JA	35/50/70/100/150 Pa			

## Drain Pump Option Available with All Models

The line-up consists of two types, models with or without a built-in drain pump.



PEAD-SP JA → Drain pump built-in



PEAD-SP JAL → No drain pump

\* Units with an "L" included at the end of the model name are not equipped with a drain pump.



## PEAD SERIES

## SERIES SELECTION

### Indoor Unit



PEAD-SP JA

### Outdoor Unit



SUZ-SA71VA2  
SUZ-SA100VA



PUHZ-SP100YHA



PUHZ-SP125/140VHA/YHA

### Remote Controller (Optional)



PAR-31MAA  
Optional



PAC-YT52CRA  
Optional



PAR-FL32MA  
Optional

## PEAD-SP SERIES

Type				Inverter Heat Pump				
Indoor Unit				PEAD-SP71JA(L)	PEAD-SP100JA(L)	PEAD-SP100JA(L)	PEAD-SP125JA(L)	PEAD-SP140JA(L)
Outdoor Unit				SUZ-SA71VA2	SUZ-SA100VA	PUHZ-SP100YHA	PUHZ-SP125VHA (YHA)	PUHZ-SP140VHA (YHA)
Refrigerant				R410A(*1)				
Power Source				Outdoor power supply				
Supply Outdoor ( V / Phase / Hz )				V: 230 / Single / 50, Y: 400/Three/50				
Cooling	Capacity	Rated	kW	7,1	9,4	9,4	12,3	13,0
		Min-Max	kW	3,5 - 8,1	5,0 - 9,9	4,9 - 9,9	5,5 - 13,0	5,5 - 14,0
	Total Input	Rated	kW	2,35	3,12	3,12	4,38	4,32
	EER			3,02	3,01	3,01	2,81	3,01
	Design load		kW	7,1	9,4	9,4	-	-
	Annual electricity consumption *2		kWh/a	446	593	602	-	-
	SEER			5,2	4,6	4,6	-	-
		Energy efficiency class		A	B	B	-	-
Heating (Average Season)	Capacity	Rated	kW	8,0	11,2	11,2	13,5	15,5
		Min-Max	kW	3,5 - 8,9	5,1 - 11,5	4,5 - 11,5	5,0 - 15,0	5,0 - 17,0
	Total Input	Rated	kW	2,21	3,10	3,10	3,74	4,55
	COP			3,61	3,61	3,61	3,61	3,41
	Design load		kW	6,0	8,0	8,0	-	-
	Declared Capacity	at reference design temperature	kW	5,2 (-10°C)	6,4 (-10°C)	6,3 (-10°C)	-	-
		at bivalent temperature	kW	5,4 (-7°C)	7,1 (-7°C)	7,1 (-7°C)	-	-
		at operation limit temperature	kW	5,2 (-10°C)	6,4 (-10°C)	5,0 (-15°C)	-	-
	Back up heating capacity		kW	0,8	1,6	1,7	-	-
Annual electricity consumption *2		kWh/a	1762	2627	2627	-	-	
SCOP			3,8	3,8	3,8	-	-	
		Energy efficiency class		A	A	A	-	-
Operating Current (Max)			A	18,1	28,9	15,7	30,8 (15,8)	32,3 (15,8)
Indoor Unit	Input	Rated	kW	0,17 / 0,15	0,25 / 0,23	0,25 / 0,23	0,36 / 0,34	0,39 / 0,37
	Operating Current(Max)		A	1,97	2,65	2,65	2,76	2,78
	Dimensions	HxWxD	mm	250-1100-732	250 - 1400 - 732	250 - 1400 - 732	250 - 1600 - 732	250 - 1600 - 732
	Weight		kg	33(32)	41(40)	41(40)	43(42)	47(46)
	Air Volume (Lo-Mi2-Mi1-Hi)		m³/min	17,5 - 21,0 - 25,0	24,0 - 29,0 - 34,0	24,0 - 29,0 - 34,0	29,5 - 35,5 - 42,0	32,0 - 39,0 - 46,0
	External Static Pressure		Pa	35 / 50 / 70 / 100 / 150	35 / 50 / 70 / 100 / 150	35 / 50 / 70 / 100 / 150	35 / 50 / 70 / 100 / 150	35 / 50 / 70 / 100 / 150
	Sound Level (SPL) (Lo-Mi2-Mi1-Hi)		dB(A)	26 - 30 - 34	29 - 34 - 38	29 - 34 - 38	33 - 36 - 40	34 - 38 - 43
Sound Level (PWL)		dB(A)	67	69	69	65	66	
Outdoor Unit	Dimensions	HxWxD	mm	880 - 840 - 330	943-950-330(+30)	943-950-330(+30)	1350-950-330(+30)	1350-950-330(+30)
	Weight		kg	52	56	77	99 (101)	99 (101)
	Air Volume	Cooling	m³/min	58,2	57,1	60,0	100,0	100,0
		Heating	m³/min	49,2	54,6	60,0	100,0	100,0
	Sound Level (SPL)	Cooling	dB(A)	55	55	50	51	52
		Heating	dB(A)	55	55	54	55	56
	Sound Level (PWL)	Cooling	dB(A)	65	70	70	70	70
	Operating Current (Max)		A	16,1	28	13	28 (13)	29,5 (13)
Breaker Size		A	20	20	16	32 (16)	40 (16)	
Ext. Piping	Diameter	Liquid/Gas	mm	9,52 / 15,88	9,52 / 15,88	9,52 / 15,88	9,52 / 15,88	9,52 / 15,88
	Max.Length	Out-In	m	30	30	30,0	40	40
	Max.Height	Out-In	m	30	30	30,0	30	30
Guaranteed Operating Range (Outdoor)	Cooling	°C	-10 ~ +46	-10 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46
	Heating	°C	-10 ~ +24	-10 ~ +24	-15 ~ +21	-15 ~ +21	-15 ~ +21	-15 ~ +21

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