

HITACHI

R410A

Front Flow Type

VRF Multi-split Air Conditioning System

SET-FREE FSNM



The conventional multi-split air conditioning systems are overspecified... But a constant-speed air conditioning system spoils the appearance of the building and involves a problem of space because it is composed of a number of units installed outdoors...

And an inverter-type packaged air conditioning system (e.g., Hitachi UTOPIA IVX) is a little difficult to use because it has restrictions on the connection of indoor units.

The **SET-FREE FSNM** series integrates the compactness and lightness of a multi-split air conditioning system (with multiple indoor units) and the user-friendliness of the SET-FREE series.



SET-FREE FSNM Advantages

- Provided in a compact body, but allows installation conditions comparable with those of a high-performance multi-split air conditioning system.
- The compact, light body facilitates delivery and installation.
- The adoption of a slim body improves flexibility in mounting, enabling installation in a small space or a formerly dead space.



R410A

Compatible with the **H-LINK**

Outdoor Units

Capacity Range [HP]	8.0	10.0	12.0
RAS-FSNM	●	●	●



Indoor Units

Capacity Range [HP]	0.8	1.0	1.5	2.0	2.5	3.0	4.0	5.0	6.0	8.0	10.0
RCI-FSN3 4-way Cassette		●	●	●	●	●	●	●	●		
RCD-FSN2 2-way Cassette		●	●	●	●	●	●	●			
RPI-FSN(2) In-the-ceiling	●	●	●	●	●	●	●	●		●	●
RPC-FSN2 Ceiling				●	●	●	●	●			
RPK-FSNM2 Wall		●	●	●	●	●	●				
RPF-FSN2E Floor		●	●								
RPFI-FSN2E Floor Concealed		●	●								

System Equipment

Capacity Range [m³/h]	250	500	800	1,000
KPI Total Heat Exchanger	●	●	●	●



Hitachi continues to propose unique product lines in order to meet demands for various types of air conditioning systems. The SET-FREE FSNM series is multi-split air conditioning system with a front-flow type fan, which combines the compactness and lightness of the UTOPIA series and the VRF function of the SET-FREE series (as of October 2008).

Comparison of HITACHI 10 HP class models

Series	UTOPIA IVX DC Inverter	NEW SET-FREE FSNM	SET-FREE FS Series	
			Hitachi's multi-split system released 15 years ago	Hitachi's latest multi-split system
Type	Front-Flow Type	Front-Flow Type	Top-Flow Type	Top-Flow Type (FSN2 Series)
Refrigerant Charge	7.8 kg	5.5 kg	17.5 kg	10.5 kg
Floor Area	0.429 m ²	0.429 m ²	1.225 m ²	0.896 m ²
Net Weight	170 kg	170 kg	345 kg	275 kg
Actual Maximum Piping Length (Equivalent length)	100 m (120 m)	100 m (120 m)	100 m (125 m)	165 m (190 m)
Total Piping Length	145 m	250 m	362 m	1,000 m
Height Difference Between Indoor and Outdoor Units (Lowest outdoor unit)	30 m (20 m)	40 m (30 m)	50 m (40 m)	50 m (40 m)
Max. Number of Connectable Indoor Units	4 units	10 units	8 units	16 units
Capacity Ratio of Connected Indoor Units *1	100%	50~130% *2	50~130%	50~130%
Min. Capacity of Connectable Indoor Units	2 HP	0.8 HP	1 HP	0.8 HP

*1. Figures indicate the capacity ratio of connected indoor units to that of an outdoor unit (total capacity of indoor units/capacity of outdoor unit).

*2. In a system where all the indoor units are often operated simultaneously, it is suggested that unit settings be kept within 100% the capacity of the outdoor unit. In a system where all the indoor units are not expected to operate simultaneously, the total capacity of the indoor units can be set up to 130% of the capacity of the outdoor unit. Be sure to keep settings within 100% the capacity of the outdoor unit in cold regions (where outdoor temperature falls below -10°C) and in other places with a heavy heating load.

Compared with multi-split air conditioning systems for buildings, the SET-FREE FSNM has a significantly smaller and lighter body as well as improved workability.

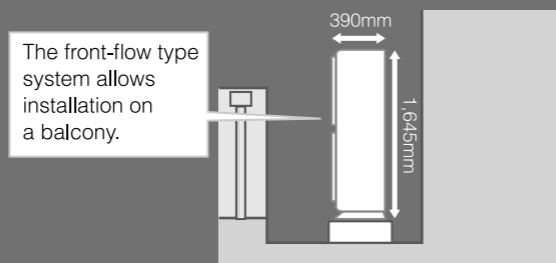
The compact design greatly improves flexibility in installation

■ Top-class Compact and Light Weight Design

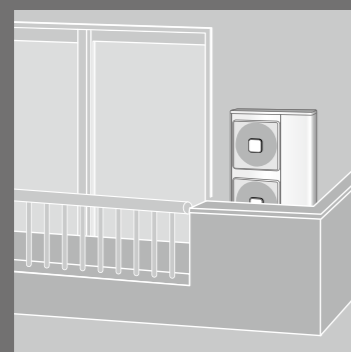
- Facilitation and flexibility at installation are further advanced by adopting outdoor unit's lightweight and compact design compared to the current top-flow model.



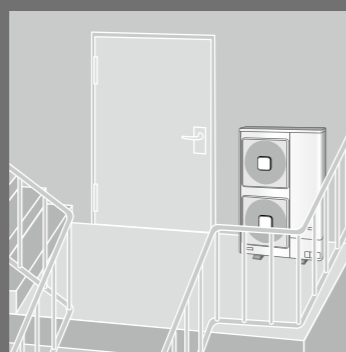
- With a width of only 390 mm, the SET-FREE FSNM can be installed on a staircase landing or balcony on each floor.
- The front-flow type system allows installation under the eaves.



■ Space-saving installation

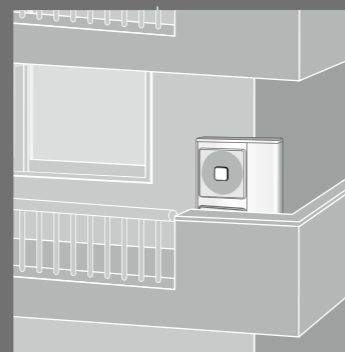


Balcony



Landing of outdoor staircase

■ Under-eaves installation



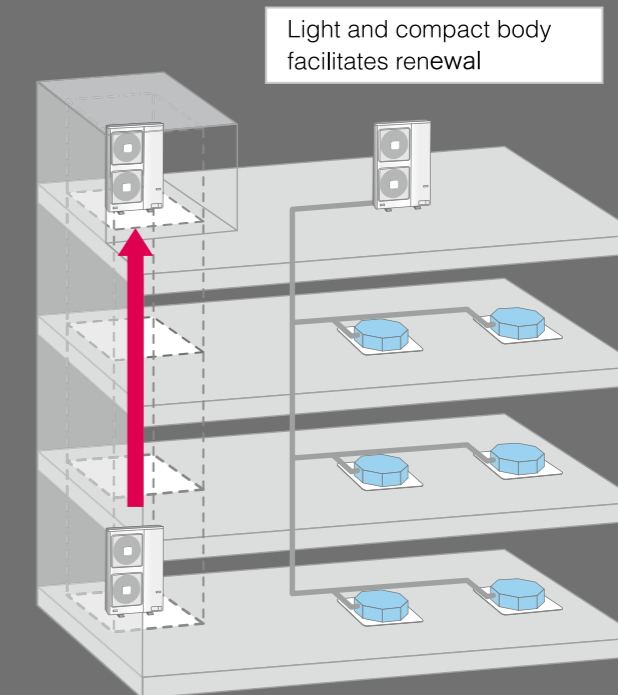
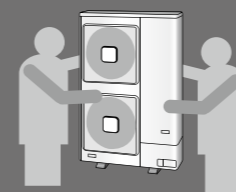
Under balcony eaves

Greater convenience during delivery and installation

- With its light and compact body, the SET-FREE FSNM can be easily carried in the elevator even in a small urban site.



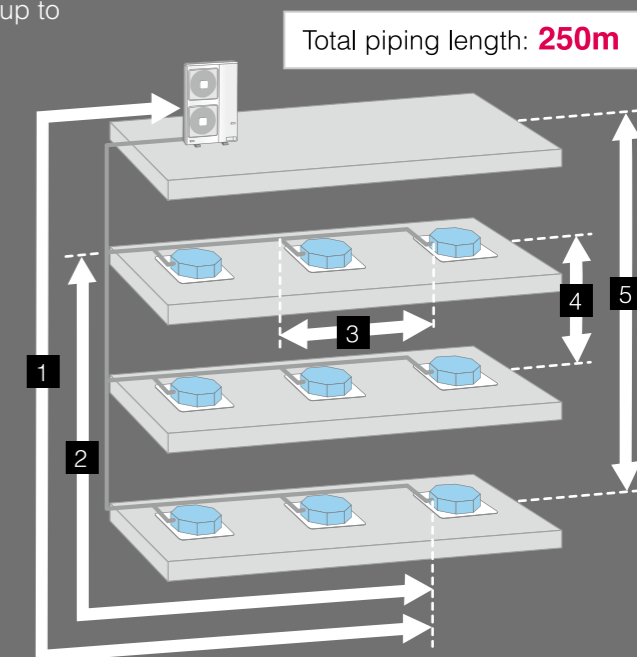
- No cranes required for delivery
- The unit can be carried at one time. Elevators can be used for delivery.



The piping can be designed and constructed up to a total piping length of 250m

- The piping can be designed and constructed up to a maximum piping length of 100m. (total piping length: 250m)

- Piping length: **100m** (Equivalent length: 120m)
- Max. length after first branch: **40m**
- Max. length after branch: **15m**
- Height difference between indoor units: **15m**
- Height difference Highest outdoor unit: **40m** Lowest outdoor unit: **30m**



High-performance VRF system in a compact body

Compact body crammed with advanced technology

■ New Type DC Inverter Scroll Compressor

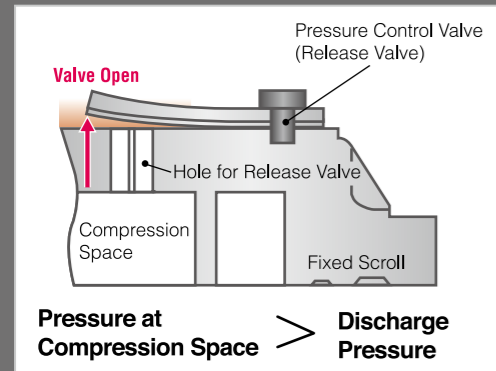
● Improved Intermediate Pressure Performance

The intermediate pressure performance is drastically improved by adopting release valve and optimizing orbiting scroll lifting force at the improved new compressing mechanism, therefore intermediate pressure performance is widely improved for energy saving.

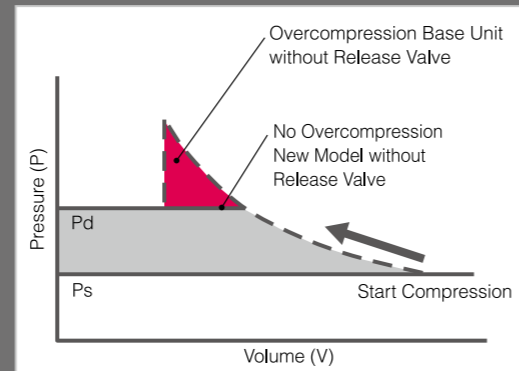
● Release Valve Adoption Prevents from Overcompression.

● Orbiting Scroll Lifting Force Optimization is Improved Leakage Loss Reduction.

■ Discharge Pressure Space



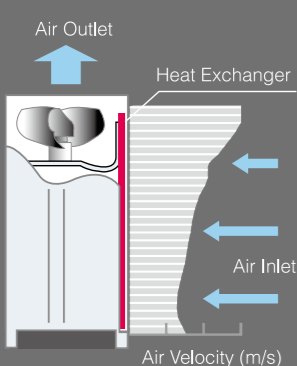
■ Theoretical PD diagram



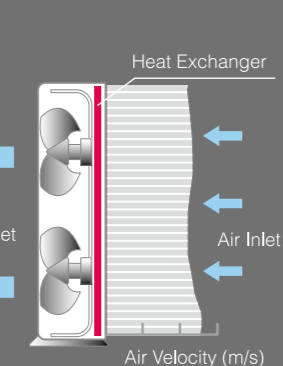
■ Technology to Improve Heat Exchanger Performance

In the front-flow model, wind speed distribution is rendered uniform by making the direction of the wind flow to the fan and the heat exchanger the same. As a result, the performance of the heat exchanger is optimized and energy is saved.

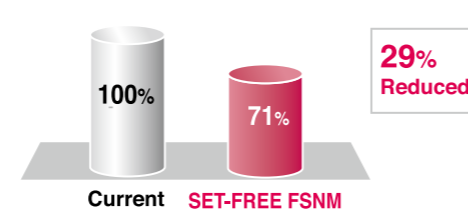
■ Current Model (Top-flow Type)



■ SET-FREE FSNM (Front-flow Type)



■ Ventilation Resistance Reduction Effect



■ Fan Motor Energy Reduction Effect



■ Low Noise Technologies

● DC Fan Motor

The smooth rotating fan motor with low vibration reduces the noise generation.



● Super High-stream Fan

Super High-stream fan of ϕ 544 mm cuts down the noise.

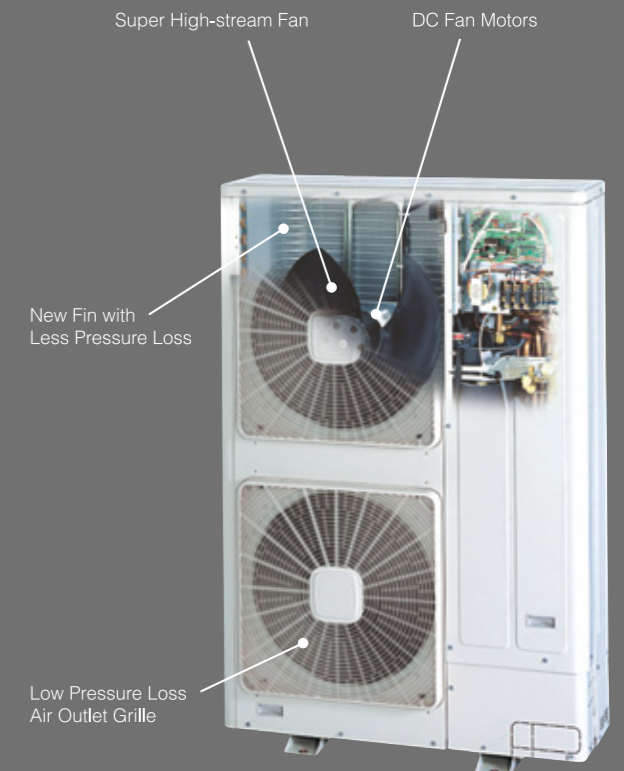
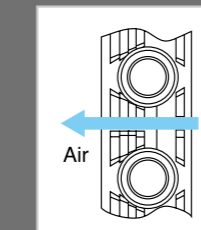


● Low Pressure Loss Air Outlet Grille

The rib structure synchronized with rotation flow from the fan reduces the air resistance at the air outlet grille.

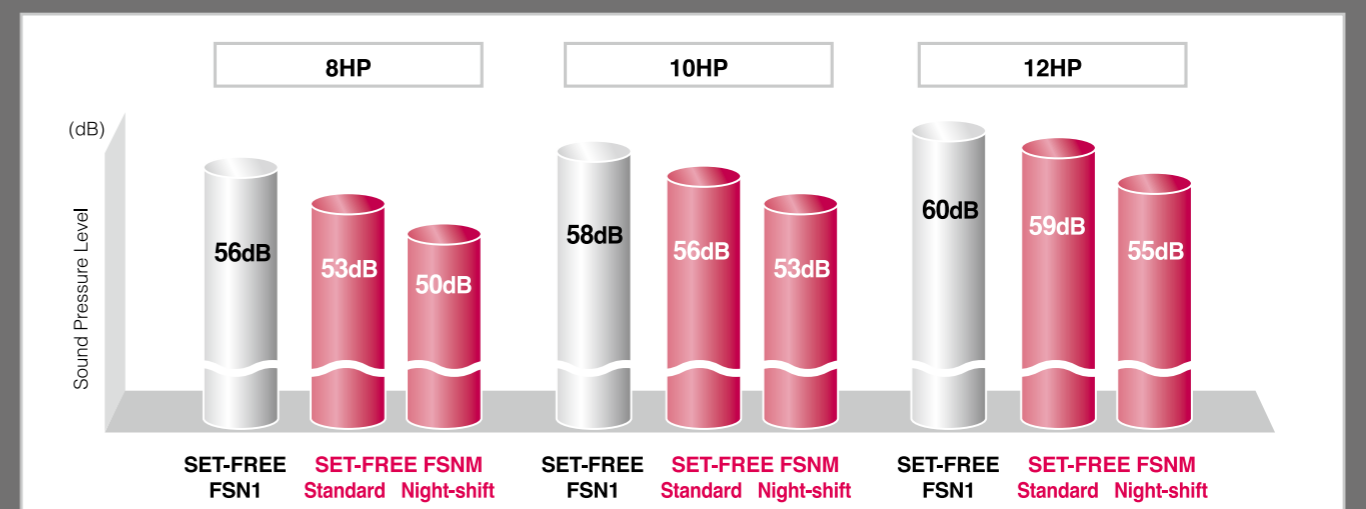
● New Fin with Less Pressure Loss

The draft resistance is reduced by 20%. Both high-efficiency and low noise operation are simultaneously satisfied.



The industry-leading low noise outdoor unit is realized by adopting the new model fin with low pressure loss.

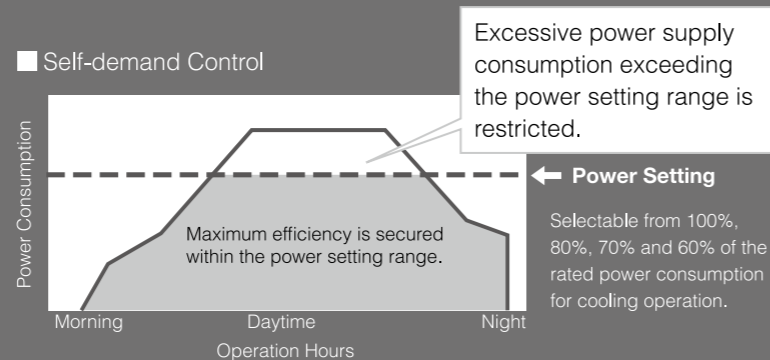
■ Comparison of Noise with Current Model (at Cooling Operation)



Compact, but unrivalled by any other multi-split air conditioning system for buildings

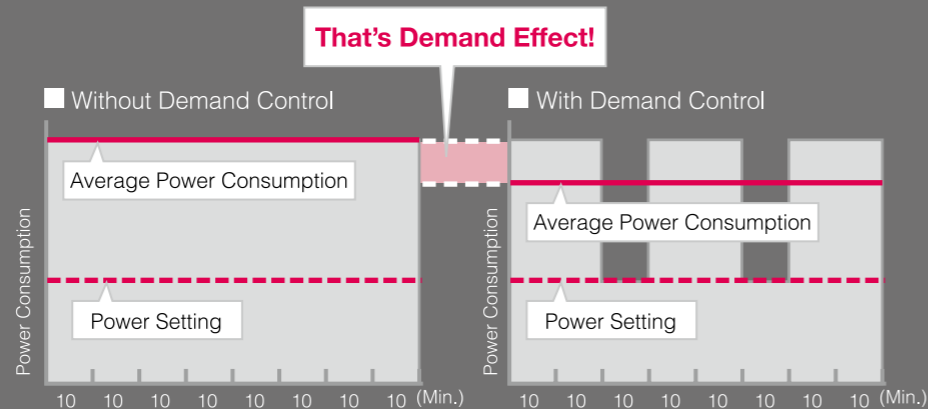
Self-demand Control

A newly developed self-demand function has largely improved energy-saving effects. Since the current is self-detected and demand control performed automatically, no signal wiring work is required. Conventional demand control using demand signals is also available, and you can select various operations as required.



Wave Mode

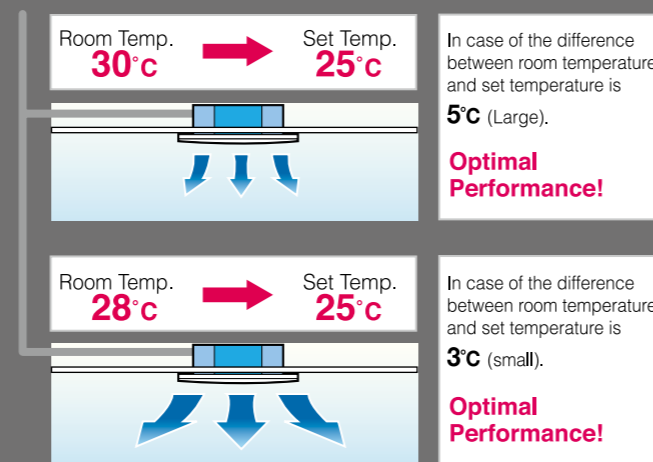
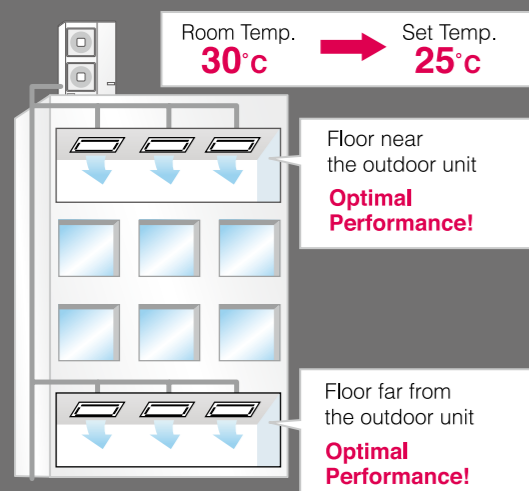
Wave mode equipped to turn demand control ON and OFF alternately at intervals of about 20 min. or 10 min. While power is saved without fail, temperature changes are also minimized to maintain a comfortable room temperature.



Smart Balance Control

The performance is the same regardless of the length of the refrigerant pipe.

Quickly senses air temperature difference to demonstrate proper performance. Energy-saving operation without loss realized.



Specifications

Model		RAS-8FSNM	RAS-10FSNM	RAS-12FSNM
Power Supply		380-415V/50Hz, 380V/60Hz, 220V/60Hz		
Nominal Cooling Capacity	kW	22.4	28.0	33.5
Nominal Heating Capacity	kW	25.0	31.5	37.5
Cabinet Color (Munsell Code)		Natural Gray (1.0Y8.5/0.5)		
Sound Pressure Level				
Cooling/Heating (Overall A Scale)	dB	53/55	56/58	59/61
Outer Dimensions				
Width	mm	1,650	1,650	1,650
Depth	mm	1,100	1,100	1,100
Height	mm	390	390	390
Net Weight				
380V/60Hz, 380-415V/50Hz	kg	170	170	173
220V/60Hz	kg	168	168	171
Refrigerant		R410A		
Flow Control		Micro-Computer Control Expansion Valve		
Compressor		Hermetic (Scroll)		
Model		E656DHD	E656DHD	E656DHD
Quantity		1	1	1
Motor Output (Pole)	kW	4.8 (4)	6.0 (4)	7.2 (4)
Refrigerant Oil		FVC68D		
Type		FVC68D		
Charge	L/Unit	1.9	1.9	1.9
Heat Exchanger		Multi-Pass Cross-Finned Tube		
Condenser Fan		Propeller Fan		
Quantity		2	2	2
Air Flow Rate	m ³ /h	121	150	163
Motor Output (Pole)	kW	0.17(8) x 1 + 0.11(6) x 1	0.17(8) x 1 + 0.12(6) x 1	0.17(8) x 1 + 0.24(6) x 1
Connections		Flare-Nut Connection (Factory-Supplied)		
Refrigerant Piping				
Liquid Line	mm (in.)	φ 9.53 (3/8)	φ 12.7 (1/2)	φ 12.7 (1/2)
Gas Line	mm (in.)	φ 19.05 (3/4)	φ 22.2 (7/8)	φ 25.4-28.6 (1)-(1-1/8)
Refrigerant Charge	kg	5.0	5.5	6.5
Approximate Packing Measurement	m ³	0.71	0.71	0.71

NOTES:

1. The above cooling and heating capacities show the capacities when the outdoor unit is operated with the 100% rating of indoor units, and are based on the standard JIS B8616-1984.

Cooling Operation Conditions

Indoor Air Inlet Temperature: 27 °C DB (80°F DB)
 19.0 °C WB (66.2°F WB)
 Outdoor Air Inlet Temperature: 35 °C DB (95°F DB)
 Piping Length: 7.5 Meters Piping Lift: 0 Meter

Heating Operation Conditions

Indoor Air Inlet Temperature: 20 °C DB (68°F DB)
 Outdoor Air Inlet Temperature: 7 °C DB (45°F DB) 6 °C WB (43°F WB)

2. The sound pressure is based on the following conditions.

1 Meter from the unit service cover surface, and 1.5 Meters from floor level.

The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

Standard Operating Conditions

		Operating Range				Standard Condition	
		Cooling		Heating		Cooling	Heating
		Continuous	Short-time	Continuous	Short-time		
Indoor Air Inlet Temperature	DB (°C)	21.5~30.0	21.0~32.0	17.0~25.0	15.0~27.0	27	20
	WB (°C)	16.0~20.5	15.0~23.0	—	—	19.0	—
Outdoor Air Inlet Temperature	DB (°C)	-5.0~43.0		—		35	7
	WB (°C)	—		-20.0~15.0		—	6



Adopting New Structured Silky Flow Louver

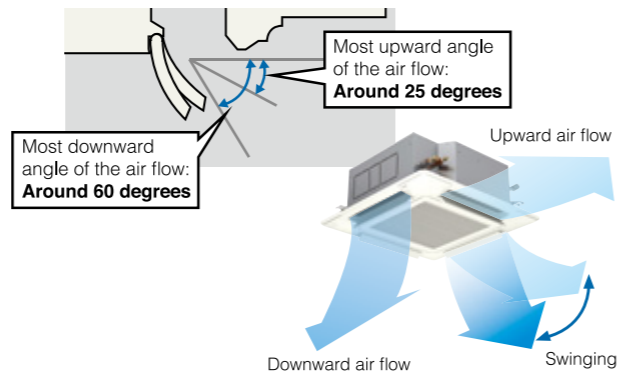
The new structured silky flow louver is adopted to soften the discomfort by the temperature irregularity and the cold draft. The individual control setting for each louver is available.



NEW Indoor Units 4-Way Cassette Type

Each of the four louvers, facing four different directions, can be controlled separately for finer air conditioning.

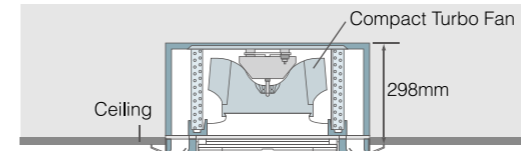
You can set the angle of each and every one of the four louvers separately. If someone in the room doesn't like being hit directly by air from the air-conditioner, you can set the louver "swing" to send more air where you want it. That means you can control the airflows to best meet the situation in the room, and what the people in it want.



Indoor Units 2-Way Cassette Type

Low-profile design allows installation in a small space inside of ceiling

A compact turbo fan simplifies the structure and reduces the height to 298 mm, for easy installation.



Top-class noise control thanks to compact turbo fan

The three-dimensional twisted wings of the compact turbo fan greatly reduce noise, and electromagnetic disturbance is minimized by PWM (Pulse Width Modulation) control.

Speed-up tap ensures comfortable air conditioning even when installed as in the high ceiling

Even rooms with a high ceiling can be comfortably air-conditioned by setting the speed-up tap with the remote control switch.



Downsizing and weight reduction simplify handling for easier renewal

The length of the 3.0HP type is shortened from 1,320 mm to 860 mm, the height is also shortened, and the volume is reduced by about 50%. The reduced weight of 30 kg also makes handling much easier.

General Data									
Model		RCI-1.0FSN3	RCI-1.5FSN3	RCI-2.0FSN3	RCI-2.5FSN3	RCI-3.0FSN3	RCI-4.0FSN3	RCI-5.0FSN3	RCI-6.0FSN3
Indoor Unit Power Supply		AC 1 φ, 220-240V / 50Hz, 220V / 60Hz							
Nominal Cooling Capacity *1)	kW	2.9	4.1	5.8	7.3	8.3	11.6	14.5	16.5
	kcal/h	2,500	3,550	5,000	6,300	7,100	10,000	12,500	14,200
	Btu/h	9,900	14,100	19,800	26,000	28,200	39,700	49,600	56,300
Nominal Cooling Capacity *2)	kW	2.8	4.0	5.6	7.1	8.0	11.2	14.0	16.0
	kcal/h	2,400	3,400	4,800	6,100	6,900	9,600	12,000	13,800
	Btu/h	9,600	13,600	19,100	24,200	27,300	38,200	47,800	54,600
Nominal Heating Capacity	kW	3.2	4.8	6.3	8.5	9.0	12.5	16.0	18.0
	kcal/h	2,800	4,100	5,400	7,300	7,700	10,700	13,800	15,500
	Btu/h	10,900	16,400	21,500	29,000	30,700	42,600	54,600	61,400
Sound Pressure Level (Overall A Scale) Hi2/Hi/Me/Lo	dB	33/30/28/27	35/31/30/27	37/32/30/27	42/36/32/28	42/36/32/28	48/43/39/33	48/45/40/35	48/46/41/37
Dimensions H x W x D	mm	248 x 840 x 840				298 x 840 x 840			
Net Weight	kg	20	21	22	26				
Refrigerant		R410A							
Air Flow Rate Hi2/Hi/Me/Lo	m ³ /min. (cfm)	15/13/11/9 (530/459/388/318)	21/17/14/11 (741/600/494/388)	21/17/14/11 (777/600/494/388)	27/23/18/14 (953/812/635/494)	27/23/18/14 (953/812/635/494)	37/31/24/20 (1306/1094/847/706)	37/33/26/21 (1306/1165/918/741)	37/35/28/22 (1306/1236/988/777)
Motor	W	57					127		
Connections Liquid / Gas	mm	φ 6.35 / φ 12.7		φ 6.35 / φ 15.88		φ 9.52 / φ 15.88			
Condensate Drain		VP25							
Approximate Packing Measurement	m ³	0.21				0.25			
Adaptable Panel Model		P-AP160NA1 (without Motion Sensor) P-AP160NAE (with Motion Sensor)							
Color		Natural White							
Dimensions H x W x D	mm	37 x 950 x 950							
Net Weight	kg	6.5							
Approximate Packing Measurement	m ³	0.10							

NOTES: 1. The nominal cooling and heating capacity is the combined capacity of the HITACHI standard split system, and is based on the JIS standard B8616.

Cooling Operation Conditions

Indoor Air Inlet Temperature: 27°C DB (80°F DB)
 *1) 19.5°C WB (67°F WB)
 *2) 19.0°C WB (66.2°F WB)
 Outdoor Air Inlet Temperature: 35°C DB (95°F DB)

Heating Operation Conditions

Indoor Air Inlet Temperature: 20°C DB (68°F DB)
 Outdoor Air Inlet Temperature: 7°C DB (45°F DB)
 6°C WB (43°F WB)
 Piping Length: 7.5 Meters
 Piping Lift: 0 Meter

2. The sound pressure level is based on following conditions.

1.5 Meters Beneath the Unit. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

General Data									
Model		RCD-1.0FSN2	RCD-1.5FSN2	RCD-2.0FSN2	RCD-2.5FSN2	RCD-3.0FSN2	RCD-4.0FSN2	RCD-5.0FSN2	
Indoor Unit Power Supply		AC 1 φ, 220-240V / 50Hz, 220V / 60Hz							
Nominal Cooling Capacity *1)	kW	2.9	4.1	5.8	7.3	8.3	11.6	14.5	
	kcal/h	2,500	3,550	5,000	6,300	7,100	10,000	12,500	
	Btu/h	9,900	14,100	19,800	25,000	28,200	39,700	49,600	
Nominal Cooling Capacity *2)	kW	2.8	4.0	5.6	7.1	8.0	11.2	14.0	
	kcal/h	2,400	3,400	4,800	6,100	6,900	9,600	12,000	
	Btu/h	9,600	13,600	19,100	24,200	27,300	38,200	47,800	
Nominal Heating Capacity	kW	3.2	4.8	6.3	8.5	9.0	12.5	16.0	
	kcal/h	2,800	4,100	5,400	7,300	7,700	10,700	13,800	
	Btu/h	10,900	16,400	21,500	29,000	30,700	42,600	54,600	
Sound Pressure Level (Overall A Scale)	dB	34-32-30	35-32-30			38-34-31		40-36-33	
Dimensions H x W x D	mm	298 x 860 x 620					298 x 1,420 x 620		
Net Weight	kg	27			30		48		
Refrigerant		R410A / R407C / R22 (Nitrogen-Charged for Corrosion-Resistance)							
Air Flow Rate Hi/Me/Lo	m ³ /min. (cfm)	10/9/8 (353/318/282)	13/11/9 (459/388/318)	15/13/11 (530/459/388)	19/16/14 (671/565/494)	29/24/21 (1,024/847/742)	34/29/25 (1,201/1,024/883)		
Motor	W	35			55		35 x 2	55 x 2	
Connections Liquid / Gas	mm	φ 6.35 / φ 12.7		φ 6.35 / φ 15.88		φ 9.53 / φ 15.88		φ 9.53 / φ 15.88*3)	
Condensate Drain		VP25							
Approximate Packing Measurement	m ³	0.23					0.37		
Adaptable Panel Model		P-N23DNA					P-N46DNA		
Color		Neutral White							
Dimensions H x W x D	mm	30 x 1,100 x 710					30 x 1,660 x 710		
Net Weight	kg	6					8		
Approximate Packing Measurement	m ³	0.10					0.15		

NOTES: 1. The nominal cooling and heating capacity is the combined capacity of the HITACHI standard split system, and is based on the JIS standard B8616.

Cooling Operation Conditions

Indoor Air Inlet Temperature: 27°C DB (80°F DB)
 *1) 19.5°C WB (67°F WB)
 *2) 19.0°C WB (66.2°F WB)
 Outdoor Air Inlet Temperature: 35°C DB (95°F DB)

Heating Operation Conditions

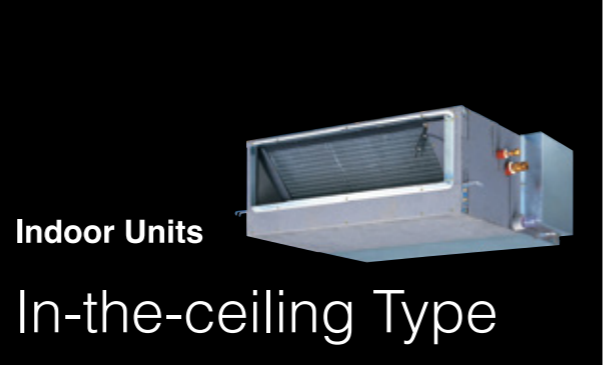
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 Outdoor Air Inlet Temperature: 7°C DB (45°F DB)
 6°C WB (43°F WB)
 Piping Length: 7.5 Meters
 Piping Lift: 0 Meter

2. The sound pressure level is based on following conditions.

1.5 Meters Beneath the Unit, Voltage of the power source for the indoor fan motor is 220V. In case of the power source of 240V, the sound pressure level increases by about 1dB.

The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

3. *3) In case of using R407C or R22, use the accessory adaptor and φ 19.05 piping.

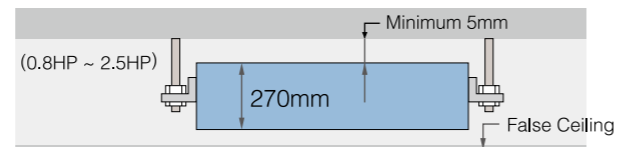


Broader range of external static pressure. Flexibly supports a wide range of installation conditions at site, e.g. longer ducts

In addition to the standard Hi-Me-Lo, the speed-up tap can be set by remote control. Available for external static pressure of up to 80 Pa for 0.8-2.5 HP and 170 Pa for 3-5 HP.

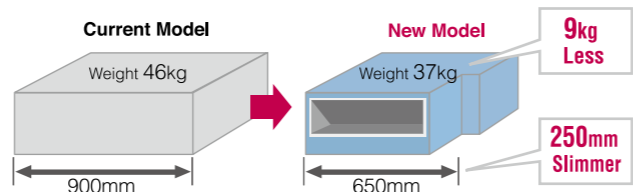
Space-saving Design

Less than 270 mm in height, this unit can be fit into practically any previously existing false ceiling or formerly ducted space without substantial modification (0.8-2.5HP).



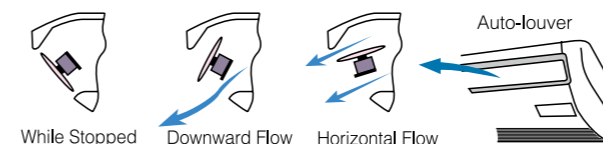
3.0HP model downsized

The width is 250mm Slimmer and the weight 9kg lighter than the current model, thus delivery and installation is easier.



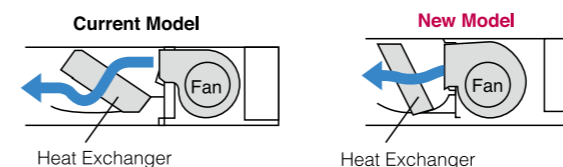
Amenity improved by auto-louver at air opening

The round, lower part of the air opening complements the gentle, quiet operation. The auto-louver in the upper part of the opening automatically controls upward and downward motion of air flow, while the grille serves as a shutter when stopped.



Noise and vibration drastically reduced by our original design

The large fan and improved resistance of the air-flow path lower the r.p.m. of the blower, thus reducing noise and vibration.



Simple Installation and Maintenance

- Installation time is much shorter. *By 30% (Hitachi's comparison)
- A long-life filter (mildew-proof) is fitted as standard. No maintenance is required for about 2,500 hours of operation. *For ordinary offices

Each part of the system is fully functional

The wireless light receiver kit (option) can be installed easily through the hole in the lower cover.

General Data											
Model	RPI-0.8FSN2	RPI-1.0FSN2	RPI-1.5FSN2	RPI-2.0FSN2	RPI-2.5FSN2	RPI-3.0FSN2	RPI-4.0FSN2	RPI-5.0FSN2	RPI-8FSN	RPI-10FSN	
Indoor Unit Power Supply	AC 1 φ, 220-240V / 50Hz, 220V / 60Hz								AC 3 φ 4W, 380-415V / 50Hz, 380V / 60Hz		
Nominal Cooling Capacity *1)	kW	2.3	2.9	4.1	5.8	7.3	8.3	11.6	14.5	23.3	29.1
	kcal/h	2,000	2,500	3,550	5,000	6,300	7,100	10,000	12,500	20,000	25,000
Nominal Cooling Capacity *2)	kW	2.2	2.8	4.0	5.6	7.1	8.0	11.2	14.0	22.4	28.0
	kcal/h	1,900	2,400	3,400	4,800	6,100	6,900	9,600	12,000	19,300	24,100
Nominal Heating Capacity	kW	2.5	3.2	4.8	6.3	8.5	9.0	12.5	16.0	25.0	31.5
	kcal/h	2,100	2,800	4,100	5,400	7,300	7,700	10,700	13,800	21,500	27,100
Sound Pressure Level (Overall A Scale)	dB	35-33-31			36-34-32	42-39-35	43-40-36	44-41-37	45(42)*	52(50)*	
Dimensions H x W x D	mm	270 x (650+75) x 720		270 x (900+75) x 720	350 x (650+75) x 800	350 x (900+75) x 800	350 x (1,300+75) x 800	470 x 1,250 x 1,120			
Net Weight	kg	26		35	37	46	58	100			
Refrigerant		R410A / R407C / R22 (Nitrogen-Charged for Corrosion-Resistance)									
Air Flow Rate Hi/Me/Lo	m ³ /min (cfm)	8/7/6 (283/247/212)	13/11/9 (459/388/318)	15/13/11 (530/459/388)	16/14/12 (565/494/424)	19/17/14 (671/600/494)	27/23/19 (954/812/671)	37/31/25 (1,306/1,095/883)	58 (58)* (2,048 (2,048*))	72 (72)* (2,542 (2,542*))	
External Pressure		50 (80-30)*3			120 (170-60)*3		220 (110)* / 260 (130)* *4				
Motor	W	60		75	150	290	760 (510)*	1,080 (810)*			
Connections	Liquid	φ 6.35		φ 6.35	φ 9.53	φ 9.53	φ 9.53*6)	φ 9.53*6)			
	Gas	φ 12.7		φ 15.88	φ 15.88	φ 15.88*5)	φ 19.05*7)	φ 22.2*8)			
Condensate Drain		VP25									
Approximate Packing Measurement	m ³	0.21		0.27	0.29	0.38	0.52	1.06	1.06		

NOTES: 1. The nominal cooling and heating capacity is the combined capacity of the HITACHI standard split system, and is based on the JIS standard B8616.

Cooling Operation Conditions

Indoor Air Inlet Temperature: 27°C DB (80°F DB)
 *1) 19.5°C WB (67°F WB)
 *2) 19.0°C WB (66.2°F WB)
 Outdoor Air Inlet Temperature: 35°C DB (95°F DB)

Heating Operation Conditions

Indoor Air Inlet Temperature: 20°C DB (68°F DB)
 Outdoor Air Inlet Temperature: 7°C DB (45°F DB)
 6°C WB (43°F WB)
 Piping Length: 7.5 Meters
 Piping Lift: 0 Meter

- The sound pressure level is based on following conditions. 1.5 Meter Beneath the Unit, With Discharge Duct (2.0m) and Return Duct (1.0m). 0.8-5.0FSN2: Voltage of the power source for the indoor fan motor is 220V. In case of the power source of 240V, the sound pressure level increases by about 1 or 2dB. 8 and 10FSN: Voltage of the power source for the indoor fan motor is 380V. In case of the power source of 415V, the sound pressure level increases by about 2dB. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
- The values with (*) of sound pressure level, air flow rate, external pressure and motor output indicate the values incase of external pressure setting at 110Pa (130Pa for 410V).
- The data for external pressure *3) indicates *Standard Pressure Setting (High Pressure Setting - Low Pressure Setting) values when a filter is not used. The data for external pressure *4) indicates the values when a filter is not used.
- *5) In case of using R407C or R22, use the accessory adaptor and φ 19.05 piping. *6) In case of using R407C or R22, use the accessory reducer and φ 12.7 piping. *7) In case of using R407C or R22, use the accessory reducer and φ 25.4 piping. *8) In case of using R407C or R22, use the accessory reducer and φ 28.6 piping.

General Data						
Model	RPC-2.0FSN2	RPC-2.5FSN2	RPC-3.0FSN2	RPC-4.0FSN2	RPC-5.0FSN2	
Indoor Unit Power Supply	AC 1 φ, 220-240V / 50Hz, 220V / 60Hz					
Nominal Cooling Capacity *1)	kW	5.8	7.3	8.3	11.6	14.5
	kcal/h	5,000	6,300	7,100	10,000	12,500
Nominal Cooling Capacity *2)	kW	5.6	7.1	8.0	11.2	14.0
	kcal/h	4,800	6,100	6,900	9,600	12,000
Nominal Heating Capacity	kW	6.3	8.5	9.0	12.5	16.0
	kcal/h	5,400	7,300	7,700	10,700	13,800
Sound Pressure Level (Overall A Scale)	dB	40-37-34			44-41-38	
Cabinet Color	Silky White					
Dimensions H x W x D	mm	210 x 1,100 x 670	210 x 1,320 x 670	270 x 1,320 x 670	270 x 1,580 x 670	
Net Weight	kg	26	30	34	42	
Refrigerant	R410A / R407C / R22 (Nitrogen-Charged for Corrosion-Resistance)					
Air Flow Rate Hi/Me/Lo	m ³ /min (cfm)	14/12/10 (494/424/353)	18/15/12 (636/530/424)	25/21/18 (883/742/636)	33/28/23 (1,165/989/812)	
Motor	W	35	50	95	135	
Connections	Liquid / Gas	φ 6.35 / φ 15.88		φ 9.53 / φ 15.88	φ 9.53 / φ 15.88*3)	
	Condensate Drain	VP20				
Approximate Packing Measurement	m ³	0.30	0.36	0.43	0.50	
Standard Accessories	Mounting Bracket					

NOTES: 1. The nominal cooling and heating capacity is the combined capacity of the HITACHI standard split system, and is based on the JIS standard B8616.

- The sound pressure level is based on following conditions. 1 Meter Beneath the Unit and 1 Meter from Discharge Grille. Voltage of the power source for the indoor fan motor is 220V. In case of the power source of 240V, the sound pressure level increases by about 1dB. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
- *3) In case of using R407C or R22, use the accessory adaptor and φ 19.05 piping.



Indoor Units Wall Type



User Friendly

Easy switching from wireless to wired remote controller by Dip Switch built-in the receiver part. All alarm code is displayed when using wireless remote controller by combining the flashing times of "Timer", "Filter/Defrosting". (All models)

Top-Class Compact and Light Weight Design

More Choice to select the installation place thanks to the reduction of wideness in 2.5, 3.0 and 4.0HP



Indoor Units Floor Type

Space-saving slim unit, only 220 mm in depth

Slim line design only 220 mm in depth, allowing it to be installed without spoiling the style or beauty of the room.

Effective Use of Space by Window

With a height of 630 mm, may be installed by a window leaving plenty of window space. Best installed in a perimeter zone.



Indoor Units Floor Concealed Type

So compact that it fits into even a tiny space

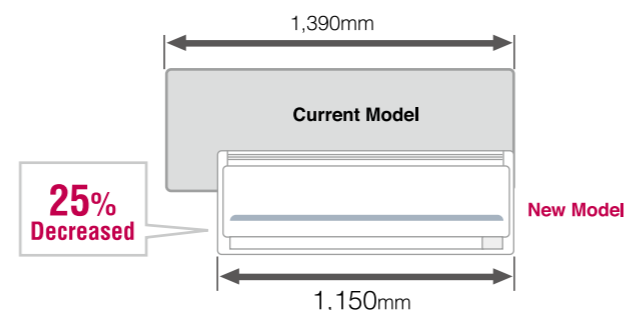
Special emphasis placed on interior design compatibility as well as space saving design, allowing it to fit perfectly into the space below a bay window.

NEW LINE-UP

RPK-1.0FSNSH2
RPK-1.5FSNSH2 (Built-to-order)

Reducing Noise by Adopting Distinctive Technology

You can select the new lineup of indoor unit wall type without expansion valve and electronic expansion valve kit according to your preference. The continuous refrigerant running noise from the indoor unit can be reduced by installing the expansion valve away from the living room such as in a false ceiling of the hallway.



General Data								
Model		RPK-1.0FSNSM2	RPK-1.5FSNSM2	RPK-2.0FSNSM2	RPK-2.5FSNSM2	RPK-3.0FSNSM2	RPK-4.0FSNSM2	
Indoor Unit Power Supply		AC 1 φ, 220-240V / 50Hz, 220V / 60Hz						
Nominal Cooling Capacity *1)	kW	2.9	4.1	5.8	7.3	8.3	11.6	
	kcal/h	2,500	3,550	5,000	6,300	7,100	10,000	
	Btu/h	9,900	14,100	19,800	25,000	28,200	39,700	
Nominal Cooling Capacity *2)	kW	2.8	4.0	5.6	7.1	8.0	11.2	
	kcal/h	2,400	3,400	4,800	6,100	6,900	9,600	
	Btu/h	9,600	13,600	19,100	24,200	27,300	38,200	
Nominal Heating Capacity	kW	3.2	4.8	6.3	8.5	9.0	12.5	
	kcal/h	2,800	4,100	5,400	7,300	7,700	10,700	
	Btu/h	10,900	16,400	21,500	29,000	30,700	42,600	
Sound Pressure Level (Overall A Scale)	dB	38-36-34	40-38-36	41-39-37	43-40-37		49-46-43	
Cabinet Color		White						
Dimensions H x W x D	mm	280 x 780 x 210		295 x 1,030 x 208	333 x 1,150 x 245			
Net Weight	kg	10		12	18			
Refrigerant		R410A / R407C / R22 (Nitrogen-Charged for Corrosion-Resistance)						
Air Flow Rate Hi/Me/Lo	m ³ /min. (cfm)	10/8/7 (353/283/247)	11/10/9 (388/353/318)	14/12/10 (494/424/353)	17/16/14 (600/565/494)	22/20/17 (777/706/600)		
Motor	W	20			30			
Connections		Flare-Nut Connection (With Flare Nuts)						
Liquid / Gas	mm	φ 6.35 / φ 12.7		φ 6.35 / φ 15.88 or φ 12.7*3)		φ 9.53 / φ 15.88		
Condensate Drain		VP16						
Approximate Packing Measurement	m ³	0.07		0.11	0.13			
Standard Accessories		Wall Mounting Bracket						

NOTES: 1. The nominal cooling and heating capacity is the combined capacity of the HITACHI standard split system, and is based on the JIS standard B8616.

Cooling Operation Conditions

Indoor Air Inlet Temperature: 27°C DB (80°F DB)
*1) 19.5°C WB (67°F WB)
*2) 19.0°C WB (66.2°F WB)

Heating Operation Conditions

Indoor Air Inlet Temperature: 20°C DB (68°F DB)
Outdoor Air Inlet Temperature: 7°C DB (45°F DB)
6°C WB (43°F WB)
Piping Length: 7.5 Meters
Piping Lift: 0 Meter

Outdoor Air Inlet Temperature: 35°C DB (95°F DB)

2. The sound pressure level is based on the following conditions measured.

1 Meter Beneath the Unit and 1 Meter from Inlet Grille.

The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

3. *3) The refrigerant piping size may be required to change depending on the outdoor unit to be connected.

If φ 12.7 pipe is used at the gas side, remove the flare adaptor at the indoor unit gas piping. Then attach the flare nut (accessory) for pipe connection.

General Data				
Model	Floor Type		Floor Concealed Type	
	RPFI-1.0FSN2E	RPFI-1.5FSN2E	RPFI-1.0FSN2E	RPFI-1.5FSN2E
Indoor Unit Power Supply		AC 1 φ, 220-240V / 50Hz, 220V / 60Hz		
Nominal Cooling Capacity *1)	kW	2.9	4.1	2.9
	kcal/h	2,500	3,550	2,500
	Btu/h	9,900	14,100	9,900
Nominal Cooling Capacity *2)	kW	2.8	4.0	2.8
	kcal/h	2,400	3,400	2,400
	Btu/h	9,600	13,600	9,600
Nominal Heating Capacity	kW	3.2	4.8	3.2
	kcal/h	2,800	4,100	2,800
	Btu/h	10,900	16,400	10,900
Sound Pressure Level (Overall A Scale)	dB	35-32-29	38-35-31	35-32-29
Cabinet Color		Spring White		—
Dimensions H x W x D	mm	630 x 1,045 x 220	630 x 1,170 x 220	620 x 848 x 220
Net Weight	kg	25	28	19
Refrigerant		R410A / R407C / R22 (Nitrogen-Charged for Corrosion-Resistance)		
Air Flow Rate Hi/Me/Lo	m ³ /min. (cfm)	8.5/7/6 (300/247/212)	12/10/9 (424/353/318)	8.5/7/6 (300/247/212)
Motor	W	20	28	20
Connections		Flare-Nut Connection (With Flare Nuts)		
Liquid / Gas	mm	φ 6.35 / φ 12.7		
Condensate Drain		18.5 OD		
Approximate Packing Measurement	m ³	0.26	0.29	0.20

NOTES: 1. The nominal cooling and heating capacity is the combined capacity of the HITACHI standard split system, and is based on the JIS standard B8616.

Cooling Operation Conditions

Indoor Air Inlet Temperature: 27°C DB (80°F DB)
*1) 19.5°C WB (67°F WB)
*2) 19.0°C WB (66.2°F WB)

Heating Operation Conditions

Indoor Air Inlet Temperature: 20°C DB (68°F DB)
Outdoor Air Inlet Temperature: 7°C DB (45°F DB)
6°C WB (43°F WB)
Piping Length: 7.5 Meters
Piping Lift: 0 Meter

Outdoor Air Inlet Temperature: 35°C DB (95°F DB)

2. The sound pressure level is based on following conditions.

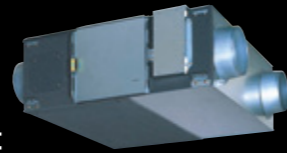
Floor Type: 1.5 Meters from the Unit and 1.5 Meters from Floor Level.

Floor Concealed Type: 1.5 Meters from the Unit and 1.5 Meters from the Floor Level.

The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

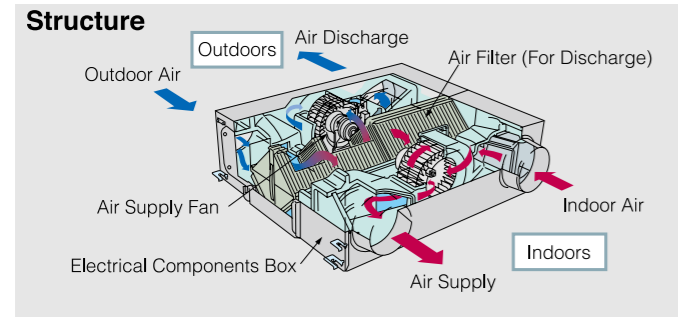
System Equipment

Total Heat Exchanger



Automatic Selection of Most Suitable Ventilation Mode

Depending on temperature conditions both outdoors and indoors, the most suitable ventilation mode is automatically selected, helping to save energy.



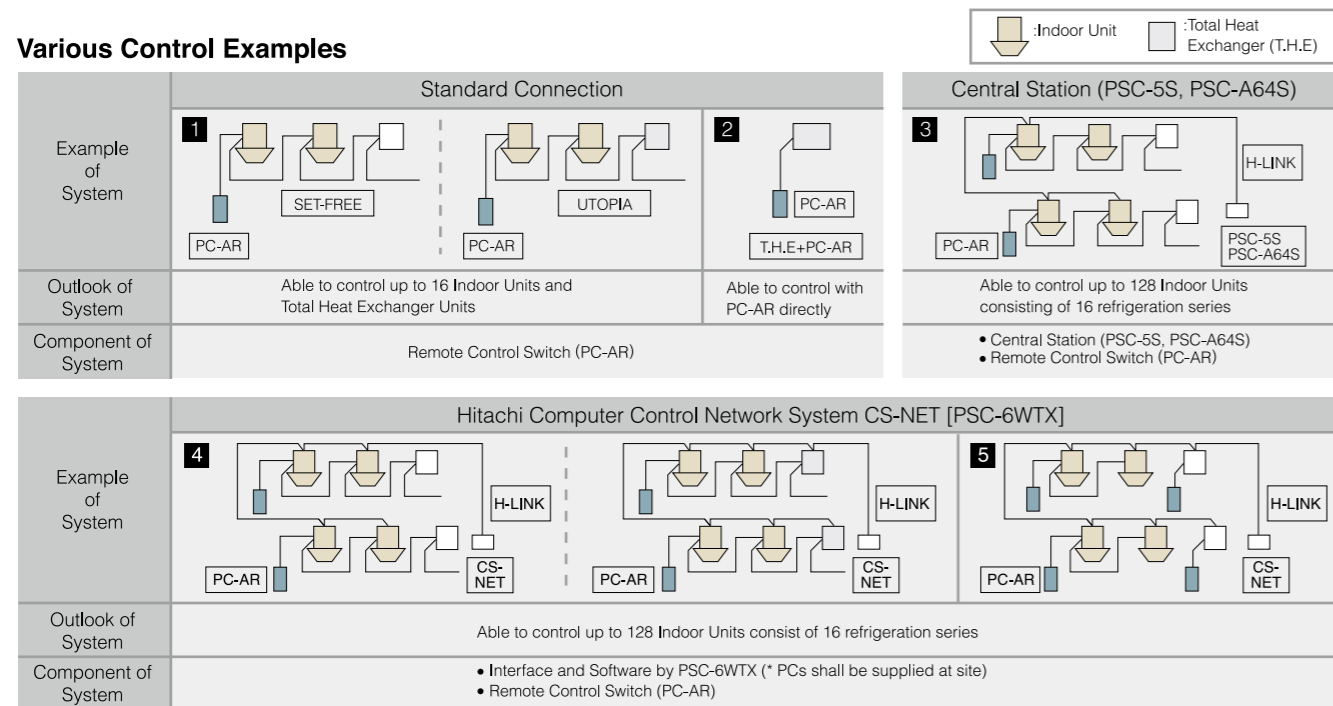
Controllable Using the Remote Control Switch for The Air Conditioning Unit

Can be controlled in various ways using the remote control switch for the air conditioning unit (PC-AR).

Fixed Type Heat Exchanging Element

- The newly-developed fixed type heat exchanging element with high temperature exchange efficiency equivalent to the rotor type element, has been adopted for the new total heat exchangers (Temp. Exchange Efficiency: 77% [in case of 500m³/h type unit]). Additionally, reliability is increased due to reduction of moving parts.
- Low weight with Simple Unit Structure: 33kg (in case of 500m³/h type unit)

Various Control Examples



General Data		KPI-2521	KPI-5021	KPI-8021	KPI-10021
Model					
Indoor Unit Power Supply		AC 1φ, 220-240V / 50Hz, 220V / 60Hz			
Air Flow Rate	50Hz	250/250/165	500/500/350	800/800/670	1,000/1,000/870
	High/Med/Low	250/250/150	500/500/300	800/800/660	1,000/1,000/720
External Pressure *1)	50Hz	65/40/20	150/60/30	140/100/70	160/100/80
	High/Med/Low	100/50/20	200/60/20	230/120/80	200/110/60
Sound Pressure Level (Overall A Scale) at 1.5m from the unit under *2) *3)	50Hz	26.5-27.5/25-26/21-22	32.5-33.5/30-31/23.5-24.5	33.5-34.5/32-33/30-31	36-37/34-35/31.5-32.5
	High/Med/Low	28.5/25.5/21	32.5/28.5/23	35/31/29	36/34/30
Dimensions H x W x D	mm	275 x 735 x 780	317 x 1,016 x 888	398 x 1,004 x 1,164	398 x 1,231 x 1,164
Net Weight	kg	21	33	61	72
Approximate Packing Measurement	m ³	0.26	0.46	0.70	0.84

NOTES: *1. Use it under the following conditions. KPI-8021: 29Pa or more, KPI-10021: 49Pa or more
 *2. The sound pressure level is based on following conditions.
 1.5 Meter beneath the unit and this data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
 *3. The sound pressure level is based on the total heat exchange mode. In case of the bypass ventilation mode, the sound pressure level is increased by approximately 1dB(A).

Indoor Units

4-Way Cassette Type

HP	1.0 ~ 2.5	3.0 ~ 5.0
Air Panel	P-AP160NA1/P-AP160NAE	
3-Way Outlet Parts Set	PI-160LS1	
Kit for Deodorant Filter		
Deodorant Filter	F-71L-D1	F-160L-D1
Filter Box		B-160H2
Antibacterial Long-life Filter	F-160L-K	
Fresh Air Intake Kit *1	OACI-160K2	
T-Pipe Connection Kit *2	TKCI-160K	
Duct Adapter *3	PD-75A (φ75)	

2-Way Cassette Type

HP	1.0 ~ 3.0	4.0 and 5.0
Air Panel	P-N23DNA	P-N46DNA
Receiver Kit for Wireless Control	PC-ALHD	
Kit for Deodorant Filter		
Deodorant Filter	F-23LD4-D	F-46LD4-D
Filter Box	B-23HD4	B-46HD4
Antibacterial Long-life Filter	F-23LD4-K	F-46LD4-K
Fresh Air Intake Kit *1	OACID-231	OACID-461
Box Connection Kit *4	TBCID-1	

In-the-ceiling Type

HP	0.8 ~ 1.5	2.0 and 2.5	3.0	4.0	5.0	8 and 10
Long-Life Filter Kit						
Long-Life Filter	F-15LI3C	F-23LI3C	F-23LI3	F-34LI3	F-46LI3	-
Filter Box	B-15MI3C	B-23MI3C	B-23MI3	B-34MI3	B-46MI3	-
Drain-up Mechanism Kit	Standard	DUPI-132C	DUPI-162			DU-M280PIS
Receiver Kit for Wireless Control	PC-ALHZ					

Wall Type

HP	1.0 and 1.5
Electronic Expansion Valve Kit *5	EV-1.5N
Receiver Kit	PC-ALHZ
Wireless Remote Control Switch	PC-LH3A

Floor and Ceiling Types

HP	RPF(I)	RPC
	1.0 and 1.5	2.0 ~ 5.0
Receiver Kit for Wireless Control	PC-ALHZ	PC-ALHP

NOTES:
 *1. It is necessary to use the Fresh Air Intake Kit to connect the fresh air intake duct to the unit.
 *2. Used when two air intakes (φ 100 x 2) of the Fresh Air Intake Kit are changed to one air intake (φ 150 x 1).
 *3. Used when fresh air intake duct are connected to the indoor unit directly.
 *4. Used when both of the Fresh Air Intake Kit and Filter Box are used.
 *5. The electronic expansion valve kit (optional part EV-1.5N) should be used with indoor unit wall type without expansion valve together.

Hitachi's proprietary high-performance transmission system for connecting control wires between indoor and outdoor units, and between a centralized control system and indoor/outdoor units, across two or more refrigerant systems.

Flexible Wiring Routes

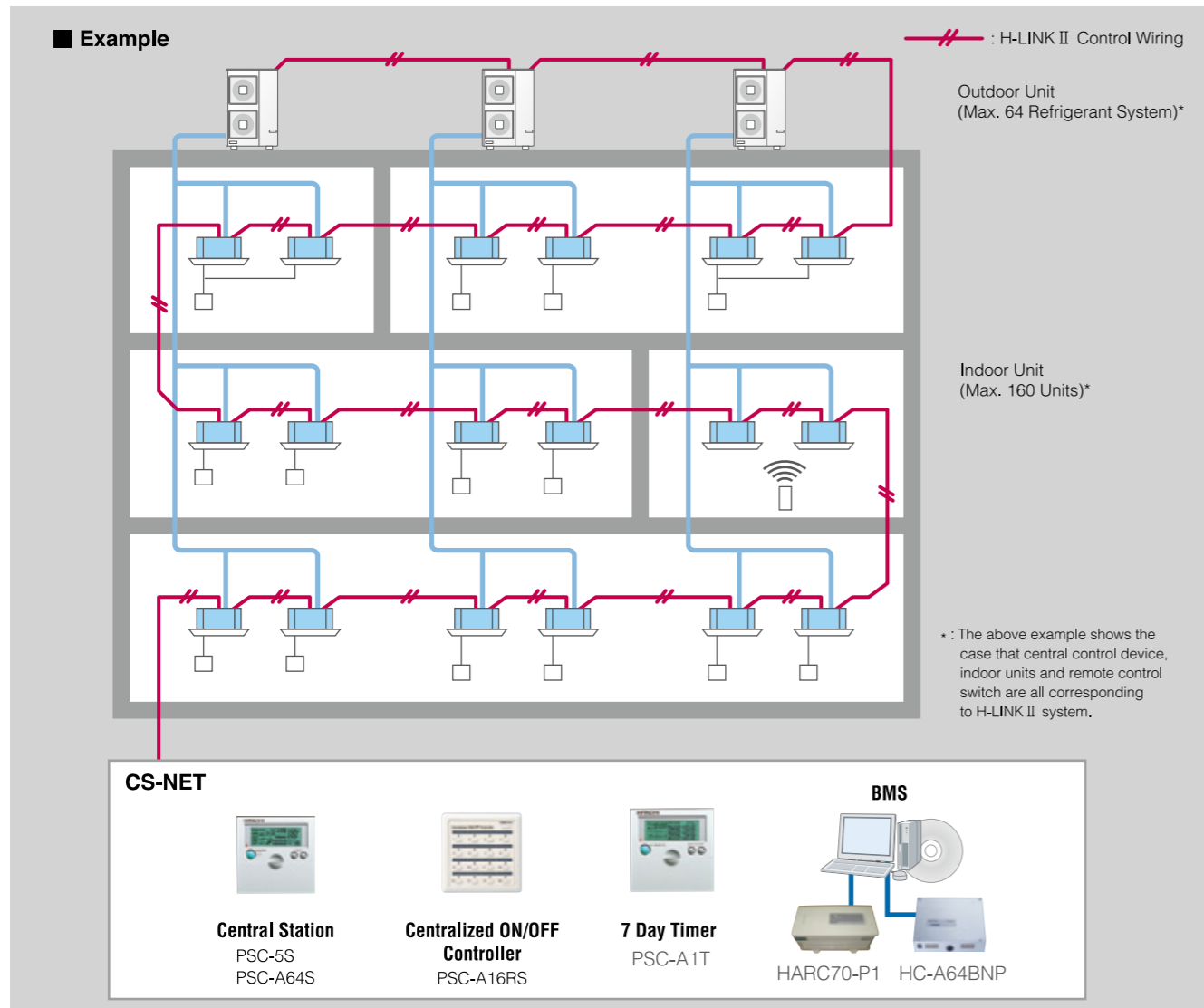
Absolutely no restrictions on the order of wiring, the wiring route and the number of branches. Simply connect to the adjacent units or the terminal block of a centralized control system.

Regardless of Multi-Split System for Buildings or Packaged System for Commercial Use

By providing a common control function and wiring method, a multi-split air conditioning system for buildings and a packaged air conditioning system for commercial use are simultaneously used in the same system, and so are the EHP and GHP air conditioning systems. Just connect all the systems with twin core cables by crossover connection. Adapters or other appliances are not required.

H-LINK II

The H-LINK transmission system for connection between outdoor and indoor units provides an extended system configuration and improved functions without sacrificing workability and the flexibility.



Compare with H-LINK System

Item	H-LINK	H-LINK II
Max. Number of Refrigerant Group / System	16	64
Address Setting Range of Indoor Units / Refrigerant Group	0 to 15	0 to 63
Max. Number of Indoor Unit / System	128	160
Total Number of Devices in the same H-LINK	145	200
Max. Wiring Length	Total 1,000m (5,000m)*	

* : In case 4 units of PSC-5HR are used.

Mixture of H-LINK and H-LINK II

H-LINK II corresponding models can be mixed with H-LINK corresponding models in the same system without any adaptor.

Control System Device	Outdoor Unit Indoor Unit	1 H-LINK (II) System	
		Outdoor Units (Number of Ref. Groups)	Indoor Units
H-LINK II	H-LINK II	64	160
	H-LINK II / H-LINK Mixed	16*	128
H-LINK	H-LINK II	16	128
	H-LINK II / H-LINK Mixed	16	128

* : A maximum 16 refrigerant groups can be connected in 1 H-LINK system under the following conditions.

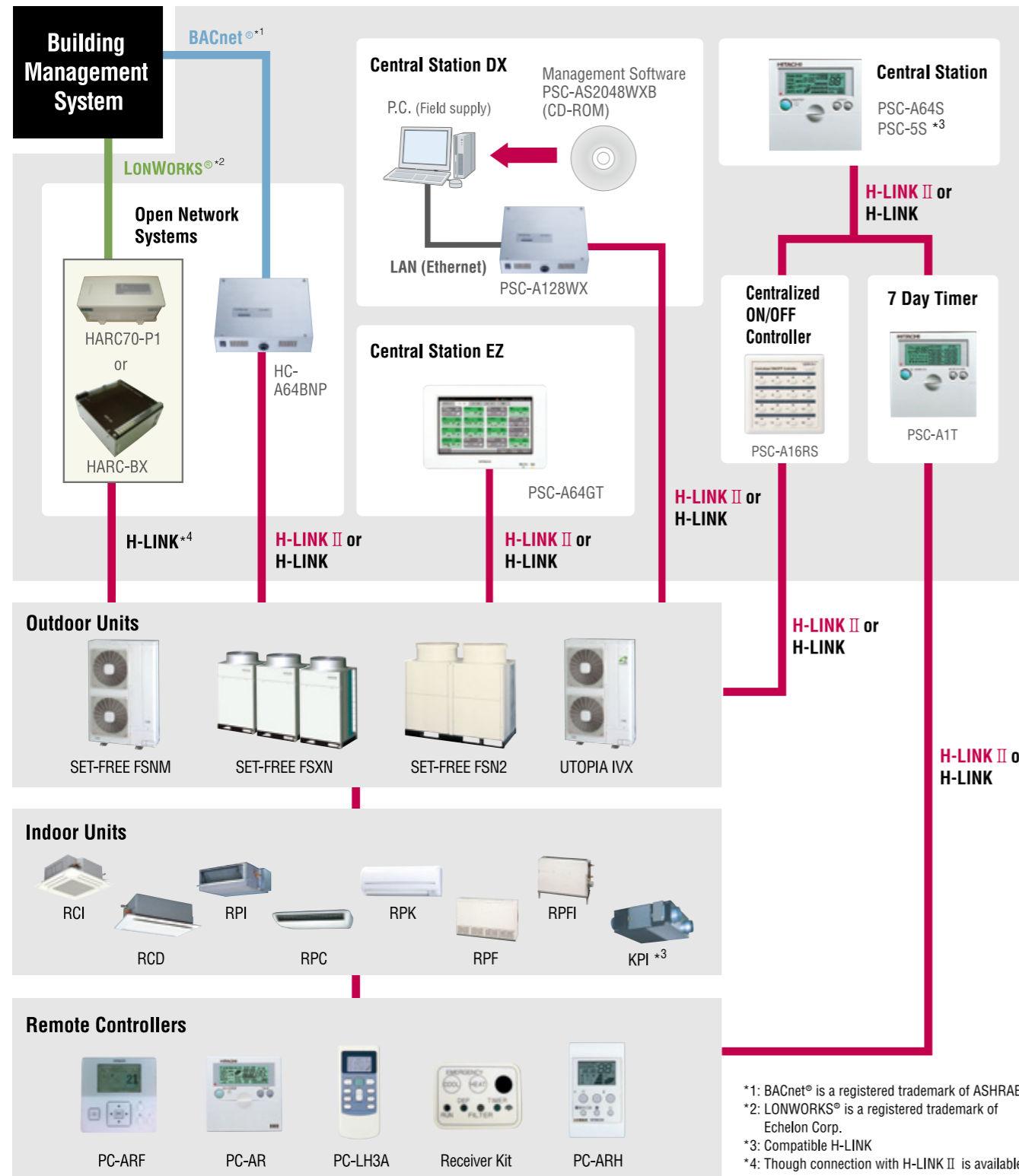
- Outdoor unit corresponding to H-LINK
 - Outdoor unit corresponding to H-LINK II connected with the indoor unit corresponding to H-LINK
- More than 17 indoor units are available to connect with the 1 outdoor unit depending on the outdoor unit capacity. In that case, 2 ref. groups are required for 1 outdoor unit

System Configuration

Outdoor Unit	SET-FREE FSN(1) Series H-LINK			SET-FREE FSNM Series H-LINK II		
	H-LINK II or H-LINK	H-LINK	H-LINK II	H-LINK II or H-LINK	H-LINK	H-LINK II
Indoor Unit	H-LINK II or H-LINK	H-LINK	H-LINK II	H-LINK II or H-LINK	H-LINK	H-LINK II
Remote Control Switch	H-LINK	H-LINK II	H-LINK II	H-LINK	H-LINK II	H-LINK II
Setting Range of Refrigerant Group* ¹⁾	0 to 15					
Setting Range of Address* ¹⁾	0 to 15	0 to 15	0 to 15	0 to 15	0 to 15	0 to 63
Automatic Reset of Setting Temperature* ²⁾	×	●	●	×	●	●
Operation Lock* ²⁾	×	●	●	×	●	●
Limitation of Setting Temperature Range* ³⁾	×	●	●	×	●	●
ON / OFF Timer Setting (72Hr)* ²⁾	×	●	●	×	●	●
Different Operation Mode Indication* ³⁾	×	×	●	×	×	●
Indoor Unit Hot-Start Indication* ³⁾	×	×	●	×	×	●
Change of Indoor Unit Ref. Group No. and Address* ²⁾	×	×	●	×	×	●
Outdoor Unit Comp. Pre-heating Indication / Cancel* ²⁾	×	×	×	×	×	●
Emergency Operation from Remote Control Switch* ⁴⁾	×	×	×	×	×	●

- *1): The range of ref. group setting and address setting is 0 to 15 when H-LINK corresponding central controller is used.
- *2): These functions can be set by wired remote control switch (PC-AR) only.
- *3): These functions can be set by wired remote control switch (PC-AR) and half size remote control switch (PC-ARH) only.
- *4): This function is not available depending on the outdoor unit type.

CS-NET is Hitachi's computer control network system for the SET-FREE FS series, SET-FREE FSNM and UTOPIA ranges. The flexibility of the SET-FREE system allows the internal data to be easily accessed and controlled by the user, with features including temperature, mode and fan speed setting and groupings.



*1: BACnet® is a registered trademark of ASHRAE.
 *2: LONWORKS® is a registered trademark of Echelon Corp.
 *3: Compatible H-LINK
 *4: Though connection with H-LINK II is available, the resulting performance is equivalent to that of the H-LINK specifications.

Interface (Option)

You can select the air conditioner control interface depending on your needs to create a comfortable space.

HC-A64BNP (for BACnet®)



Connecting the HC-A64BNP to an H-LINK (communication line between machines) allows the use of up to 8 refrigerant cycles and control of up to 64 indoor units. Up to eight HC-A64BNP can be connected to the same H-LINK.

Connection Method to Upper System	• Connection by IEEE802.3 Compliance (100BASE-TX/10BASE-T) to BACnet® Network
Quantity of Connection	• Up to 64 Indoor Units per BACnet® Adaptor
Control Item at Upper System	<ul style="list-style-type: none"> • RUN/STOP • Operation Mode Setting • Temperature Setting • Fan Speed Setting <ul style="list-style-type: none"> • Available / Not Available for Operation by Remote control Switch • Filter Sign Reset
Monitoring Item at Upper System	<ul style="list-style-type: none"> • RUN/STOP State Notification • Alarm Signal Notification • Operation Mode State Notification • Fan Speed State Notification <ul style="list-style-type: none"> • Indoor Suction Temperature Notification • Alarm Code Notification • Communication Abnormality Notification • Filter Sign

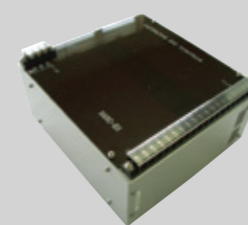
HARC70-P1 (for LONWORKS®)



By using the HARC70-P1 adapter for LONWORKS® to connect air conditioners to the total building control system, air conditioners can be centrally controlled.

Connection Method to Upper System	• Connection by SNVT (Standard Network Variable Type) to LONWORKS® Network
Quantity of Connection	• 8 Remote Control Groups (Max. 120 indoor Units)
Control Item at Upper System	<ul style="list-style-type: none"> • On/Off Order • Operation Mode Setting <ul style="list-style-type: none"> • Temperature Setting • All On/Off Order
Monitoring Item at Upper System	<ul style="list-style-type: none"> • On/Off State & Alarm • Operation Mode State <ul style="list-style-type: none"> • Temperature Setting • Individual Thermostat State

HARC-BX (for LONWORKS®)



A HARC-BX can connect to multiple H-LINK with H-LINK transmission terminal to 8 PCB.

Points for control and monitor have been increased to meet more points. (Points for control and monitor is 8 times larger than HARC70P-1.)

You can select the number of controls, monitor, and what to control in the indoor unit from three choices (Standard, Option A and Option B) as needed.

■ HARC-BX E (Standard)

Connection Method to Upper System	• Connection by SNVT (Standard Network Variable Type) to LONWORKS® Network
Quantity of Connection	• 64 Indoor Units
Control Item at Upper System	<ul style="list-style-type: none"> • On/Off Order • Operation Mode Setting <ul style="list-style-type: none"> • Temperature Setting • All On/Off Order
Monitoring Item at Upper System	<ul style="list-style-type: none"> • On/Off State & Alarm • Operation Mode State <ul style="list-style-type: none"> • Temperature Setting • Individual Thermostat State

■ HARC-BX E (Option A)

Connection Method to Upper System	• Connection by SNVT (Standard Network Variable Type) to LONWORKS® Network
Quantity of Connection	• 64 Indoor Units
Control Item at Upper System	<ul style="list-style-type: none"> • On/Off Order • Operation Mode Setting • Temperature Setting <ul style="list-style-type: none"> • Temperature Setting • All On/Off Order • Fan Speed Setting • R.C.Sw Permission/Prohibition
Monitoring Item at Upper System	<ul style="list-style-type: none"> • On/Off State & Alarm • Inlet Air Temperature

■ HARC-BX E (Option B)

Connection Method to Upper System	• Connection by SNVT (Standard Network Variable Type) to LONWORKS® Network
Quantity of Connection	• 32 Indoor Units
Control Item at Upper System	<ul style="list-style-type: none"> • On/Off Order • Operation Mode Setting • Temperature Setting <ul style="list-style-type: none"> • Fan Speed Setting • R.C.Sw Permission /Prohibition • All On/Off Order • Louver Position Setting
Monitoring Item at Upper System	<ul style="list-style-type: none"> • On/Off State & Alarm • Operation Mode State • Fan Speed Setting <ul style="list-style-type: none"> • Temperature Setting • Louver Position • Alarm Code • Inlet Air Temperature • Outlet Air Temperature • Outdoor Air Temperature



NEW

Remote Control Switch PC-ARF

Compatible with the H-LINK II

- The newly adopted LED-backlit LCD provides enhanced legibility. Large, clear character display is realized by Full Dot Matrix LCD.
- The newly adopted the directional key provides optimized operation. The manual operation is facilitated by reducing number of switch buttons from 13 to 9.
- "Schedule Timer" provides the timer operations for "Run/Stop" and "Temperature Setting". The weekly management is available by using this function. In addition "Holiday Setting" and "Schedule ON/OFF" setting are available.
- 4 type of menus are offered for flexible use as follows:
Menu: Contains "Schedule", "Elevating Grill", etc. for users.
Help Menu: Contains information provided by this remote control switch for users such as "About Indication", "Contact Information", etc.
Test Run Menu: This menu provides the functions installation of this remote control switch.
Check Menu: This menu provides the functions for service and maintain



Remote Control Switch PC-AR

Compatible with the H-LINK II

- The PC-AR has a design that matches the interior.
- The new large LCD display permits users to see the operating conditions and settings.
- The timer can be set at half-hour intervals up to 72 hours.
- All the functions can be selected by remote control switches.
- The PC-AR monitors the operating conditions in the system and an alarm is issued if a problem occurs.
- A "self-diagnosis function" checks for problems on printed boards in indoor and outdoor units.
- Equipped with energy-saving functions such as a preset temperature range limiting function for preventing excessive cooling/heating and a preset temperature automatic reset function, as well as an operation locking mechanism and the capability to prevent users from forgetting to turn off the system. (Function selection setting is required)



Wireless Remote Control Switch PC-LH3A

Compatible with the H-LINK II

- One-touch handy operation, no wiring work required.
- Two or more units can be operated simultaneously by remote control. * Receiver kit is required.



Half-size Remote Control Switch PC-ARH

Compatible with the H-LINK II

- The main function of this easy-to-use remote control system is temperature setting.
- Operation modes can be switched over (when function selection setting is made).
- Suitable for facilities used by various people, such as hotels.
- "2 remote control" or "group control" (up to 16 max.) can be used.
- If a problem occurs, an alarm code immediately shows the details of the problem.



7 Day Timer PSC-A1T

Compatible with the H-LINK II

- By using with PSC-5S, PSC-A64S and PC-AR controllers, the air conditioners controlled by them can be operated according to a schedule.
- The timer can be set at 7-day intervals, and operation/stop can be set 3 times daily.
- Remote control can be prohibited in accordance with the OFF time (when used with PSC-5S, PSC-A64S and PC-AR).
- Two types of weekly schedule (A and B) can be set, and can easily be changed for summer and winter.
- Settings are all digitally displayed, allowing operations and settings to be checked easily.
- The power failure backup function prevents the timer from being stopped by a power failure lasting up to 2 weeks.



Central Station PSC-A64S

Compatible with the H-LINK II

Up to 160 indoor units

Up to 64 remote control groups

PSC-5S

Up to 128 indoor units

Up to 16 remote control groups

- By connecting to the H-LINK, up to 64 remote control groups and 160 indoor units can be controlled. Up to 8 units can be connected to the H-LINK.
- In addition to basic control, such as settings for operation/stop, the operation mode and temperature, the air quantity and auto louver can be set. If a problem occurs, an alarm code immediately shows the details of the problem.
- An external input terminal is provided as standard. External signals enable the following functions: central operation/stop, demand control, emergency stop, central operation output, and central alarm output.
- Can be used in combination with the One-touch Controller.



Centralized ON/OFF Controller PSC-A16RS

Compatible with the H-LINK II

Up to 160 indoor units

Up to 16 remote control groups

- Only performs operation/stop control per remote control group.
- By connecting to the H-LINK, up to 16 remote control groups and 160 indoor units can be controlled. Up to 8 units can be connected to the H-LINK.
- An external input terminal is provided as standard. External signals enable the following functions: central operation/stop, emergency stop, central operation output, central alarm output
- Can be used in combination with the Central Station.

* Make sure to use it with a remote control switch. Indoor units cannot be used without a remote control switch.
* There are restrictions on remote group registration. Please contact our sales staff for more information.

Control System

		RCI-FSN3	RCD-FSN2	RPI-FSN(2)	RPC-FSN2	RPK-FSNM2	RPF(I)-FSN2E	KPI
Remote Control Switch	PC-AR*1 (Without cable)	×	●	●	●	●	●	●
	PC-ARF	●*5	●	●	●	●	●	●
Wireless Remote Control Switch	PC-LH3A	×	●	●	●	●	●	×
Half-size Remote Control Switch	PC-ARH*2	×	●	●	●	●	●	×
7-Day Timer	PSC-A1T*3	●	●	●	●	●	●	×
Central Station	PSC-5S, PSC-A64S*4	●*6	●	●	●	●	●	●
Central Station DX	PSC-128WX + PSC-AS2048WXB	●*6	●	●	●	●	●	●
Centralized ON/OFF Controller	PSC-A16RS	●	●	●	●	●	●	●
Remote Control Cable	PRC-5K,10K,15Kfor PC-AR	●	●	●	●	●	●	●
3P Connector Cable	PCC-1A	●	●	●	●	●	●	●
Remote Sensor	THM-R2A	●	●	●	●	×	●	×
P/C Network System CS-NET	PSC-6WTX	●	●	●	●	●	●	×

● : Applicable × : Not Applicable

NOTES: *1. As the PC-AR does not include a remote control cable, prepare one in the field, or use PRC-5K, 10K, or 15K.

*2. Make sure that it is used with PC-AR or CS-NET.

*3. Scheduled operation is possible by using in combination with Central Station, Remote Control Switch and Centralized ON/OFF Controller.

*4. Supply 220V or 240V.

*5. When FSN3 4-way cassette type indoor unit is used with the remote control switch, PC-ARF must be used.

*6. These central stations are not supported the air flow volume function "HIGH 2" of FSN3 4way cassette type. Therefore, when FSN3 4-way cassette type indoor unit is used with the central stations, the remote control switch (PC-ARF) must be required.

Outdoor Units

Multi-Kit

Line Branch

Line branch can be placed in the collective duct by modifying line branch configuration. Cold insulation taping work is simplified by changing the insulation materials into styrol, thus the workability on site is further improved.

First Branch

Outdoor Unit HP	Model
8	MW-102AN
10 and 12	MW-162AN

Pipe Diameter and Multi-Kit after First Branch

Total Indoor Unit Capacity	Gas / Liquid (φ mm)	Model
12 or more	25.4-28.6 / 12.7	MW-162AN
9 to 11.99	22.2 / 9.53	MW-102AN
6 to 8.99	19.05 / 9.53	
Lower than 6	15.88 / 9.53	

Header Branch

The number of accessory pipes are reduced in order to facilitate the brazing work on site.

Total Indoor Unit Capacity at Header Branch	No. of Header Branches	Model
5 to 8HP	4	MH-84AN
5 to 10HP	8	MH-108AN

Strainer Kit

Product Name	Model
Strainer Kit	MEF-NP1500A

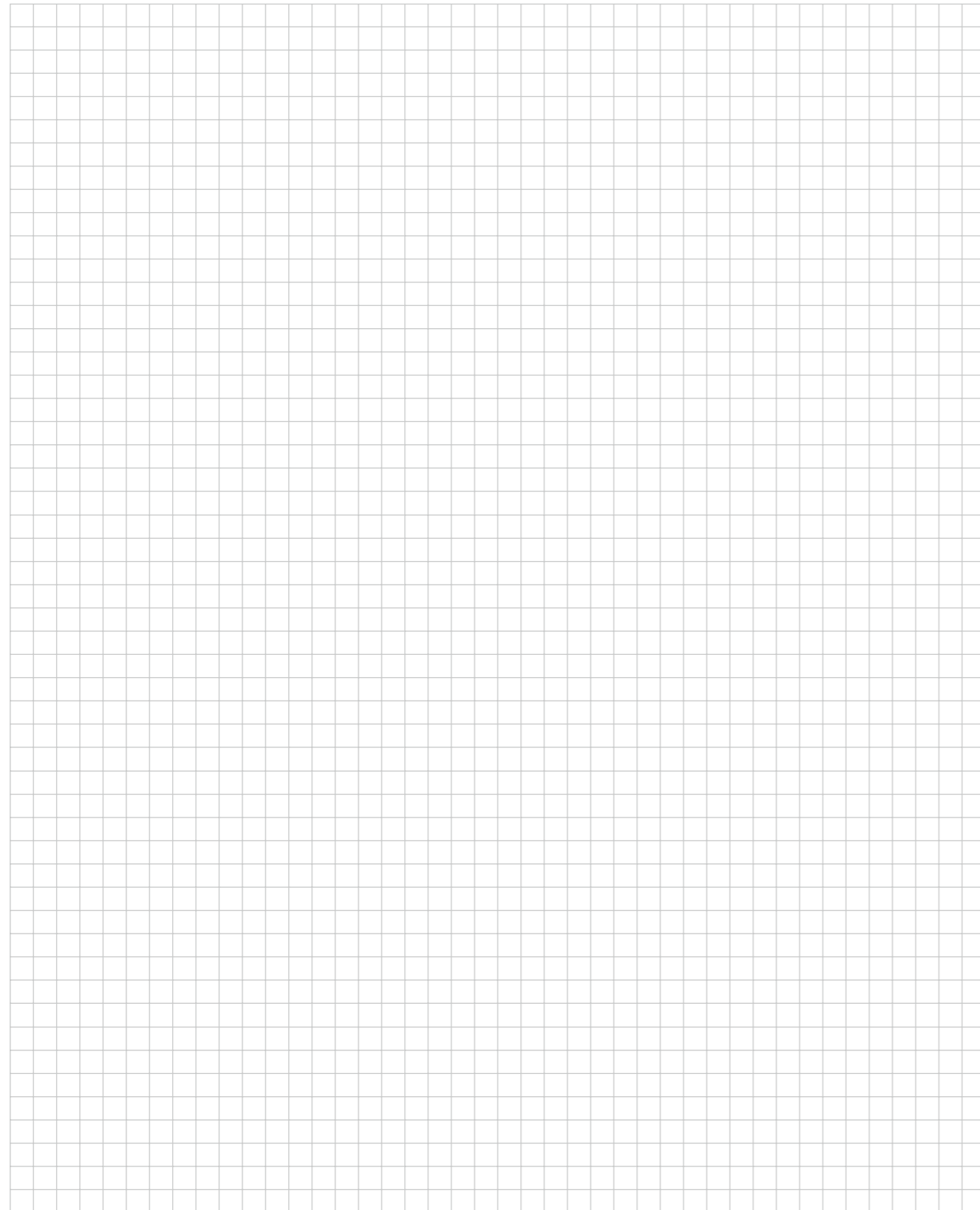
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■ Consultant:

■ Contractor:

■ Delivery Date:

■ System Layout:



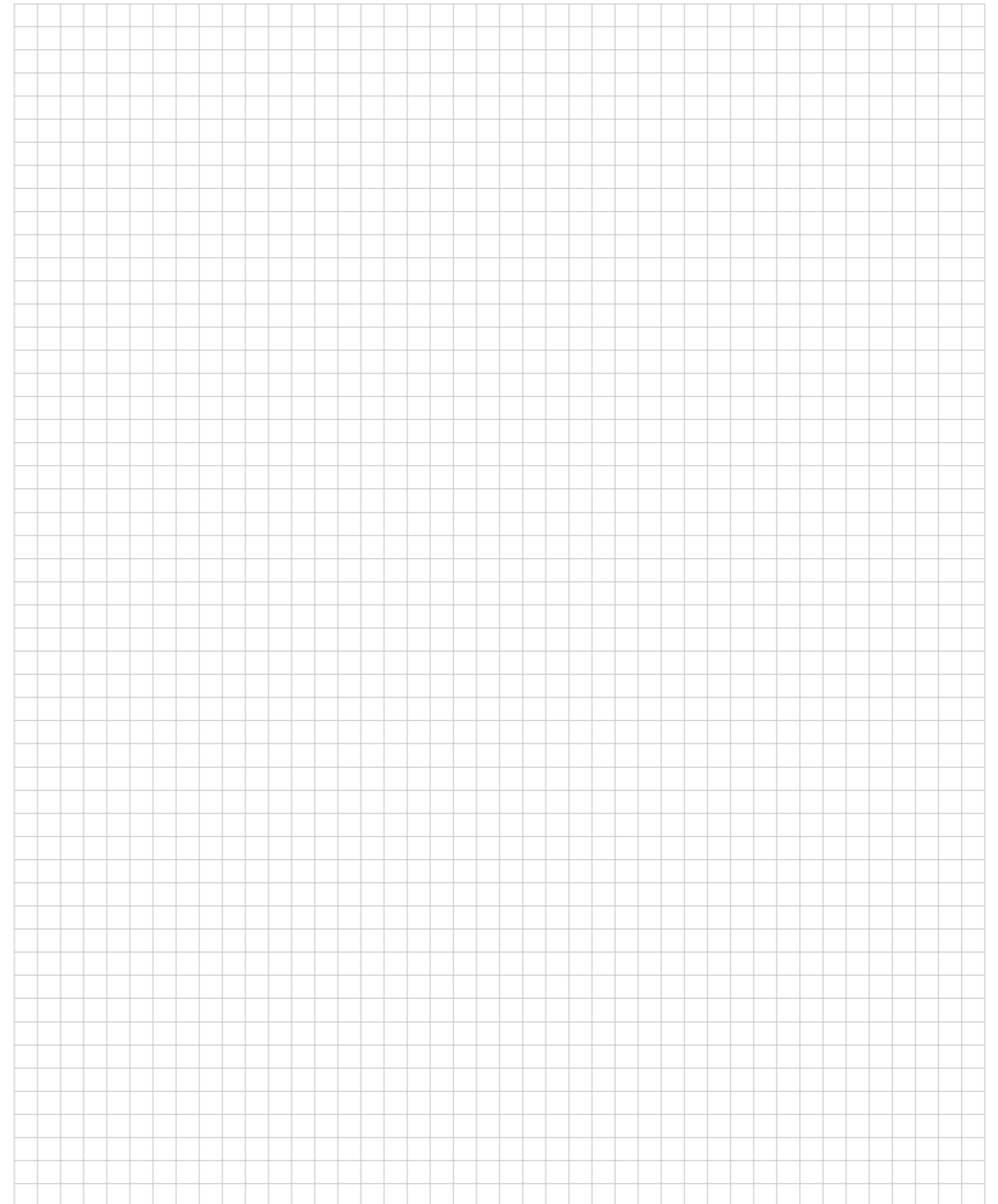
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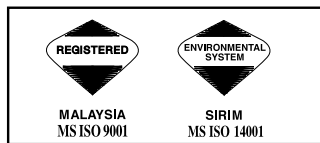




ISO 9001



ISO 14001



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