

Multizone Air Conditioning

Multiple Indoor Units to One Outdoor Unit







Hitachi Multizone

Multiple indoor units, one outdoor unit

An Hitachi Multizone is a air conditioning system that combines one outdoor unit with multiple indoor units all controlled independently of each other. Different types of indoor units of varying heating and cooling capacity can be connected – dependent on the number of rooms and their size and shape.

Multizone is ideal for homes, small offices and shops. It is an effective and economical way of air conditioning several rooms. For instance, Multizone is perfect if you would like to heat your lounge and some of the bedrooms or if you have a commercial area with several offices you need to cool.

A Multizone system with one outdoor unit combined with various indoor units creates more flexibility in installation and saves outside space.



Multizone

Hitachi Multizone allows a combination of wall mounted, cassette and bulkhead (ducted) type units all run from a single outdoor unit and controlled independently. Multizone is an effective and economical way of air conditioning up to six rooms and you are able to choose an indoor unit type to suit each individual room.



5 Year Warranty

Temperzone Ltd, established in 1956, distributes Hitachi Air Conditioners throughout Australia and is Australasia's largest air conditioning manufacturer and exporter. Hitachi Air Conditioners from Australia have a 5 year warranty on all parts and labour. It's a comfort to know temperzone confidently guarantees the quality of Hitachi products.



Heats and Cools

Hitachi Multizone systems have been designed to keep you comfortable all year round. They provide both heating and cooling so you get cosy comfortable heating in Winter, and refreshing cooling in Summer allowing you to escape from the heat of the day and sleep peacefully at night. While operating at the same time indoor units all run in the same mode (heating or cooling).

Dehumidify

Using cooling or 'Dry Mode' Hitachi Multizone systems are designed to reduce the humidity in the air keeping your house dry and comfortable.

All Conditions

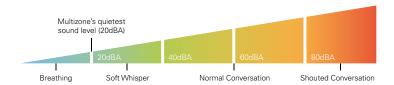
Multizone will operate in almost any Australian weather conditions, supplying heating with outside temperatures as low as -15°C, and cooling while temperatures are as high as 46°C.



Quiet

Whisper Quiet

Hitachi Multizone systems are quiet. The quietest wall mount in our multizone range has a sound level of only 20dBA in it's lowest mode. Multizone indoor units will operate between low and medium fan speed most of the time. This is where it's very important to be quiet and where all Multizone indoor units excel.



Air Purifying Filters

Air Filtration

Multizone wall mounted units feature cutting edge Nano Titanium air purifying filters which catch and neutralise germs, bacteria, allergens, mould and odour molecules. All Multizone indoor units are supplied with pre-filters which remove dust particles.

Energy Efficient

Energy Efficient

Multizone systems maintain low running costs by providing more heating or cooling energy than they use. For every 1.0kW of electricity used, as much as 3.9kW heating and 3.6kW cooling can be delivered. So for every \$1.00 you spend on power you can receive as much as \$3.90 heating in return.





You'll find the perfect Multizone solution for your home

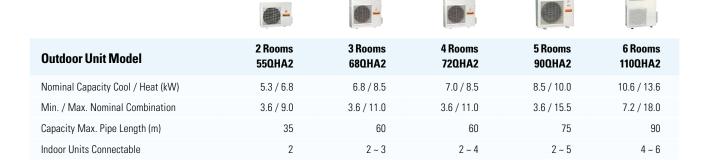
The Multizone indoor unit range caters for all requirements with a wide selection of smart compact wall mounted and cassette units and concealed in-the-ceiling bulkhead units. With the ability to attach up to 6 indoor units and connect them with up to 90m of piping you'll customise a Multizone system that will ensure you live in comfort all year round.







Indoor Unit Model	Wall Mount (RAK)	Bulkhead (RAD)	4-Way Cassette (RAI)
1.8 / 2.5 kW (cooling/heating)	✓	✓	
2.5 / 3.9 kW (cooling/heating)	✓	✓	✓
3.5 / 4.8 kW (cooling/heating)	✓	✓	✓
5.0 / 6.5 kW (cooling/heating)	✓	✓	✓
6.0 / 7.3 kW (cooling/heating)	✓		
7.0 / 8.5 kW (cooling/heating)	✓		



Wireless Remote Controller

Hitachi's contemporary styled remote control allows you full control of your air conditioner from the comfort of your armchair. Accompanying all wall mounted and cassette indoor units it boasts an array of impressive features to make life much easier. With the ability to preset how you'd like your heat pump to operate – each day of the week, when you're not home and over summer and winter, you'll live in comfort all year round while barely raising a finger.

Weekly Timer Function

Forget about turning your air conditioner on and off every day, make life easy, preset it to automatically turn on and off or change temperature to suit your weekly life style. The seven day timer function allows you to set up to six on/off time and temperature settings for each day of the week. Wake up in the morning and arrive home at night to a deliciously comfortable home.

Make life even easier by preseting two seven day schedules (mode A & B) and choose the desired schedule as required e.g winter and summer. No more manually changing your settings when the season changes because it's all there ready to go.

Eco / Eco Sleep Mode

Help keep your power consumption to a minimum with **Eco** mode, a setting which runs your system at a slightly reduced rate using less power. Great for when you leave home for short periods but want your home to stay cosy for when you return.

Setting your **Eco Sleep** Timer will run your unit through a sequence designed to save power without disrupting your sleep. Over the period of an hour indoor and outdoor fan speeds will decrease and the temperature will slightly shift to save power.

Leave Home Function

Preset your air conditioner to start automatically if the internal temperature gets down to 10°C while you're not home. Great for locations that experience very cold conditions this function keeps your home from getting too cold helping prevent dampness and mould which affect your health and home.

Tracking Power Consumption

There'll be no more surprises when the power bill comes in as you can now monitor your heat pumps power usage directly from your wireless controller.

Wired Wall Controller

The wired wall controller comes standard with bulkheads and as an option with wall mounts and cassettes. It includes a 24 hour timer function allowing you to simply relax without having to remember to turn your unit on and off.



Wireless Controller closed/open (RAR-5E)

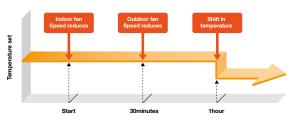
Example of 'Mode A' for Winter Season

		Mon	Tue	Wed	Thur	Fri		Sat	:	Sun
6:00	0	ON / 25°C	0	ON / 27°C						
8:00	0	OFF	OFF	OFF	OFF	OFF				
10:00							0	ON / 25°C		
12:00	0	ON / 27°C								
14:00	0	OFF	OFF	OFF	OFF	OFF			0	OFF
16:00							8	ON / 26°C		
18:00	6	ON / 27°C	0	ON / 27°C						
20:00										
22:00	6	OFF	OFF	OFF	OFF	OFF	6	OFF	9	OFF

Example of 'Mode B' for Summer Season

		Mon	Tue	Wed	Thur	Fri		Sat	Sun
6:00	0	ON / 23°C	0	ON / 23°C					
8:00	0	OFF	OFF	OFF	OFF	OFF			
10:00							0	OFF	
12:00	0	ON / 20°C							
14:00	0	OFF	OFF	OFF	OFF	OFF			
16:00									
18:00	6	ON / 20°C	0	ON / 22°C					
20:00									
22:00	0	OFF	OFF	OFF	OFF	OFF	0	OFF	

Mode A and mode B weekly timer settings



Eco Sleep Timer in heating operation



Wall Controller (SPX-RCDA)



Wall Mounted (RAK)

Automatic Louvres

Compact louvres deliver a sweeping airflow quickly to every corner of the room, eliminating dead zones and improving the cooling and heating effect. Units feature both up/down and left/right auto swing operation (RAK-60/70 manual left/right).

High Efficiency

The Lambda-shaped heat exchanger's advanced design has a wide suction area and graduated design grille which increases both the efficiency and performance of the heat exchanger.

Silent Operation

Trapezoidal fan blades cut the air diagonally to minimise air resistance, causing less friction which reduces sound and improves efficiency.

Air Purifying Filter

Units feature Nano Titanium air purifying filters. Hitachi's Nano Titanium air purifying filter has been proven to effectively deactivate over 99% of bacteria, 98% of allergens such as dust mites and leave a room deodorised by removing up to 82% of odour molecules in the first hour alone.

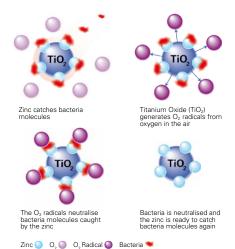
All units have a washable antibacterial pre-filter to absorb and collect larger dust and pollen particles.



RAK-60NHA2, RAK-70NHA2



RAK-18NHA2 - RAK-50NHA2



Model	RAK-18NHA2	RAK-25NHA2	RAK-35NHA2	RAK-50NHA2	RAK-60NHA2	RAK-70NHA2
		General	Specifications			
Capacity						
Nom. Cooling Capacity (kW)	1.8	2.5	3.5	5.0	6.0	7.1
Nom. Heating Capacity (kW)	2.5	3.4	4.2	6.5	7.3	8.5
Sound Pressure Level (Ra	inge)					
Cooling (dBA)	20 ~ 35	20 ~ 38	25 ~ 41	27 ~ 47	28 ~ 47	30 ~ 48
Heating (dBA)	23 ~ 36	23 ~ 39	26 ~ 41	27 ~ 47	33 ~ 47	33 ~ 49
Dimension (Net)						
Height / Width / Depth (mm)	300 / 790 / 230	300 / 790 / 230	300 / 790 / 230	300 / 790 / 230	295 / 1030 / 207	295 / 1030 / 207
Weight (kg)	10	10	10	10	11	11
Indoor Fan						
Air Flow Rate Cooling (ℓ/sec)	67 / 83 / 112 / 133	80 / 102 / 117 / 142	67 / 102 / 133 / 168	83 / 113 / 150 / 217	88 / 127 / 175 / 225	115 / 137 / 183 / 258
Air Flow Rate Heating (l/sec)	67 / 97 / 125 / 150	80 / 117 / 133 / 158	67 / 117 / 142 / 192	92 / 113 / 158 / 225	142 / 158 / 192 / 250	142 / 158 / 192 / 290
Air Purifying Filter			Nano Tit	anium		
Pre-Filter (Std. / Optional)			Washable /	Stainless		
Control (Std. Remote/Optional Wired)	RAR-5E1 / SPX-RCDB	RAR-5E1 / SPX-RCDB	RAR-5E1 / SPX-RCDB	RAR-5E1 / SPX-RCDB	RAR-5E2 / SPX-RCDB	RAR-5E2 / SPX-RCDB
		Installer	Specifications			
Refrigerant Piping						
Liquid / Gas Line (mm)	6.35 / 9.52	6.35 / 9.52	6.35 / 9.52	6.35 / 12.7	6.35 / 12.7	6.35 / 15.88
Interconnecting Wiring			2C+E 1.5	5mm²		
Remote On / Off			HA PI	ug		
Adapter (Central Control)			PSL-6F	•		









































Cooling Operation Conditions: Indoor Air Inlet Temperature: 27°C DB / 19°C WB, Outdoor Air Inlet Temperature: 35°C DB. Piping Length: 5.0m Piping Lift: 0m. Heating Capacity Conditions: Indoor Air Inlet Temperature: 20°C DB, Outdoor Air Inlet Temperature: 7°C DB / 6°C WB. Sound Pressure Level Measurement Distance: 1m from discharge grille, 0.8m beneath the unit's height centre.



Bulkhead Type (RAD)

Concealed Unit

Subtle vents, located throughout your home or office, quietly and efficiently deliver cool or warm air throughout the room maintaining a constant temperature. The unit is easily installed out of sight in the ceiling or wardrobe and is ideal for retrofits or new homes.



Built-in Drain Pump

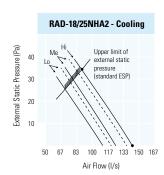
The unit is equipped with an internal drain pump (500mm lift) to remove accumulated condensate from the drain pan during operation. This will allow you more flexibility when it comes to your installation options.

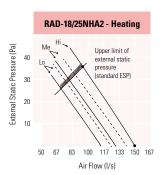


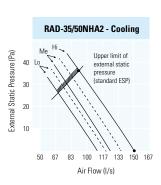
Installation with and without ducting

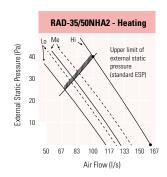
Static Pressure & Airflow

With a highly effective multi-blade centrifugal fan it provides efficient, yet gentle, airflow with minimal sound even at high fan speeds.









Model	RAD-18NHA2	RAD-25NHA2	RAD-35NHA2	RAD-50NHA2
	General Spe	cifications		
Capacity				
Nominal Cooling Capacity (kW)	1.8	2.5	3.5	5.0
Nominal Heating Capacity (kW)	2.5	3.5	4.8	6.0
Sound Pressure Level (Range)				
Cooling (dBA)	29 ~ 36	29 ~ 36	29 ~ 36	29 ~ 38
Heating (dBA)	27 ~ 37	27 ~ 37	27 ~ 37	29 ~ 38
Outer Dimension (Net)				
Height / Width / Depth (mm)	235 / 750 / 400	235 / 750 / 400	235 / 750 / 400	235 / 750 / 400
Weight (kg)	16	16	16	16
Indoor Fan				
Air Flow Rate Cooling (\ell/sec)	92 / 103 / 122 / 136	92 / 108 / 125 / 142	92 / 108 / 125 / 142	92 / 100 / 125 / 142
Air Flow Rate Heating (ℓ/sec)	92 / 103 / 125 / 153	100 / 117 / 133 / 167	100 / 117 / 133 / 167	100 / 117 / 133 / 175
Pre Filter	Washable	Washable	Washable	Washable
Control (Standard Wired / Optional Remote)		SPX-RCDA (wired) / SPX	K-RCKA (remote)	
	Installer Spe	cifications		
Refrigerant Piping				
Liquid / Gas Line (mm)	6.35 / 9.52	6.35 / 9.52	6.35 / 9.52	6.35 / 12.7
Interconnecting Wiring		2C+E 1.5m	nm²	
Remote On / Off		HA Plug		



Adapter (Central Control)





















PSC-6RAD











Cooling Operation Conditions: Indoor Air Inlet Temperature: 27°C DB / 19°C WB, Outdoor Air Inlet Temperature: 35°C DB. Piping Length: 5.0m Piping Lift: 0m. Heating Capacity Conditions: Indoor Air Inlet Temperature: 20°C DB, Outdoor Air Inlet Temperature: 7°C DB / 6°C WB. Sound Pressure Level Measurement Distance: 1.5m from discharge grille, 0.8m beneath the unit's height centre.



Cassette Type (RAI)

Discreet Unit

Cassettes which fit into the ceiling, are a discreet, economical and effective way of air conditioning open plan areas or large bedrooms. Usually located centrally within a room they do not use up valuable wall space and are especially effective in higher ceiling applications.



Flexible & Quiet Airflow System

The cassette can be configured as 2-way, 3-way or 4-way airflow. A super-high-stream turbo fan enables greater airflow efficiency while minimising sound with it's 3D-twisted wing design (just 25dB in sleep mode).



The panel can be swung open up to 90° with just one push so that the washable filter can be removed for cleaning.



Built-in Drain Pump

The unit is equipped with an internal drain pump (500mm lift) to remove accumulated condensate from the drain pan during operation. This will allow you more flexibility when it comes to your installation options.



Compact Size

The $600 \text{mm} \times 600 \text{mm}$ ceiling unit fits neatly inside a standard office tile minimising installation time and makes it perfect for shops and offices.

Model	RAI-25NHA2	RAI-35NHA2	RAI-50NHA2	RAI-ECPP Panel
	Gener	al Specifications		
Capacity				
Nominal Cooling Capacity (kW)	2.5	3.5	5.0	-
Nominal Heating Capacity (kW)	3.5	4.8	6.2	-
Sound Pressure Level (Range)				
Cooling (dBA)	25 ~ 35	26 ~ 39	29 ~ 43	-
Heating (dBA)	27 ~ 36	29 ~ 40	30 ~ 43	-
Outer Dimension (Net)				
Height / Width / Depth (mm)	285 / 580 / 580	285 / 580 / 580	285 / 580 / 580	32 / 650 / 650
Weight (kg)	20	20	20	4
Indoor Fan				
Air Flow Rate Cooling (\ell/sec)	92 / 100 / 117 / 133	108 / 117 / 142 / 158	108 / 125 / 142 / 175	-
Air Flow Rate Heating (\ell/sec)	108 / 117 / 133 / 150	125 / 133 / 142 / 183	125 / 142 / 150 / 192	-
Air Purifying Filter / Pre Filter	Nano Titanium (optional) / Washable	Nano Titanium (optional) / Washable	Nano Titanium (optional) / Washable	-
Control (Standard Remote / Optional Wired)	RAR-5E2 / SPX-RCDB	RAR-5E2 / SPX-RCDB	RAR-5E2 / SPX-RCDB	-
	Install	er Specifications		
Refrigerant Piping				
Liquid / Gas Line (mm)	6.35 / 9.52	6.35 / 9.52	6.35 / 12.7	-
Interconnecting Wiring	2C+E 1.5mm ²	2C+E 1.5mm ²	2C+E 1.5mm ²	-
Remote On / Off	HA Plug	HA Plug	HA Plug	-
Adapter (Central Control)	PSC-6RAD	PSC-6RAD	PSC-6RAD	

































Cooling Operation Conditions: Indoor Air Inlet Temperature: 27°C DB / 19°C WB, Outdoor Air Inlet Temperature: 35°C DB. Piping Length: 5.0m Piping Lift: 0m. Heating Capacity Conditions: Indoor Air Inlet Temperature: 20°C DB, Outdoor Air Inlet Temperature: 7°C DB / 6°C WB. Sound Pressure Level Measurement Distance: 1.5m from discharge grille, 0.8m beneath the unit's height centre.

Outdoor Units (RAM)









Model	2 rooms RAM-55QHA2	3 rooms RAM-68QHA2	4 rooms RAM-72QHA2	5 rooms RAM-900HA2	R/	6 rooms AM-110QHA2
		General Specifi	cations			
Capacity						
Nominal (min max.) Cooling Capacity (kW)	5.3 (1.5 ~ 6.6)	6.8 (2.4 ~ 8.8)	7.0 (2.4 ~ 8.8)	8.5 (1.5 ~ 9.5)		10.6 (1.5 ~ 13.2)
Nominal (min max.) Heating Capacity (kW)	6.8 (1.5 ~ 7.2)	8.5 (2.8 ~ 9.5)	8.5 (2.8 ~ 9.5)	11.0 (1.5 ~ 11.5)		13.6 (1.5 ~ 14.4)
Nominal Cooling Power Input (kW)	1.50	2.04	2.08	2.56		3.00
Nominal Heating Power Input (kW)	1.85	2.37	2.40	2.74		3.70
EER / AEER (Cooling)	3.63 / 3.53	3.37 / 3.29	3.37 / 3.28	3.32 / 3.23		3.62 / 3.52
COP / ACOP (Heating)	3.98 / 3.88	3.54 / 3.48	3.54 / 3.46	3.54 / 3.46		3.95 / 3.85
Sound Pressure Level (Overall Sca	ale)					
Cooling (dBA) (max.)	52	53	53	55		55
Heating (dBA) (max.)	53	56	56	58		56
Outer Unit Dimensions						
Height / Width / Depth (mm)	650 / 850 / 298	800 / 850 / 298	800 / 850 / 298	800 / 950 / 370		1450 / 855 / 308
Weight (kg)	50	55	55	71		113
	30	30	00	71		110
Usable Outdoor Temperature						
Cooling (°C)	-10 ~ 46	-10 ~ 46	-10 ~ 46	-10 ~ 46		-10 ~ 46
Heating (°C)	-15 ~ 21	-15 ~ 21	-15 ~ 21	-15 ~ 21		-15 ~ 21
		nstaller Specifi	cations			
Refrigerant Piping						
Liquid Line (mm)	6.35 (x 2)	6.35 (x 3)	6.35 (x 4)	6.35 (x 5)		6.35 (× 6)
Gas Line (mm)	9.52 (x 2)	9.52 (x 3)	9.52 (x 3) / 12.7 (x 1)	9.52 (x 3) / 12.7 (x 2)		9.52 (× 6)
Refrigerant	R410a	R410a	R410a	R410a		R410a
Flow Control	Expansion Valve	Expansion Valve	Expansion Valve	Expansion Valve		Expansion Valve
Compressor Type	1 x DC Twin Rotary	2	CDC Twin Rotary			
Condenser Fan Air Flow Rate (l/sec)	600	750	750	1083		1200
Pipe Run					Indoor 1, 2, 3	Indoor 4, 5, 6
Max. Pipe Length (m)	35	60	60	75	45	45
Individual Pipe Length (m)	25	25	25	25	25	25
Pre-charged Length (m)	35	30	30	30	35	35
Additional Charges (g/m)	-	20	20	15	20	20
Max. Pipe Lift (m)	20	20	20	20	20	20
Max. Height Between Indoor Units (m)	5	5	5	5	5	5
Power Supply			AC 1Ph 220 ~ 240V 50	1Hz		
Starting Current (A)	7.7	12.4	12.4	16		20
Recommended Fuse Size	16	16	30	30		30
Interconnecting Wiring	2C+F 1.5mm ²	2C+F 1.5mm ²	2C+F 1.5mm ²	2C+F 1.5mm ²		2C+E 1.5mm ²

 $\textbf{Cooling Operation Conditions:} \ Indoor \ Air \ Inlet \ Temperature: 27^{\circ}C\ DB\ /\ 19^{\circ}C\ WB, \ Outdoor\ Air\ Inlet \ Temperature: 35^{\circ}C\ DB. \\ \textbf{Heating Capacity Conditions:} \ Indoor\ Air\ Inlet \ Temperature: 20^{\circ}C\ DB\ , \ Outdoor\ Air\ Inlet \ Temperature: 7^{\circ}C\ DB\ /\ 6^{\circ}C\ WB.$

Icon Glossary



Nano Titanium Filter; provides both anti-bacterial and deodorising action, keeping air clean and fresh.



Fuzzy Logic Control; determines temperature and setting using a fuzzy calculation and adjusts the heat pump output.



Auto Operation; the heat pump automatically selects from heating, cooling or dry operation.



Up/Down Flap Swing; auto swing and positioning from horizontal to perpendicular.



Left/Right Flap Swing; auto swing and positioning from left to right.



7 Day On/Off and Temperature
Programmable Timer; once timers are
set, the unit will start/stop at specified
times of the week repeatedly.



Dry Operation; unit dehumidifies the room by intermittent cooling operation.



24 On/Off Programmable Timer; once timers are set, the unit will start/stop at specified times of the day repeatedly.



OffTimer; enables the unit to stop at the specified time.



OnTimer; enables the operation to start a little earlier so room temperature is close to the set temperature at ON time.



Sleep Mode; provides automatic control during the set sleep mode to maintain a continuous room temperature.



DC Inverter; the speed of the compressor is adjusted to an energy saving mode to maintain temperature and save power.



High Energy Efficiency; a permanent magnet motor delivers 10% greater efficiency than equivalent DC inverters.



DCTwin Rotary Compressor; the independent operation of the cylinders leads to greater efficiency.



PAM Performance; Hitachi's PAM (Power Active Module) ensures efficient use of input power, and minimises loss to less than 1%.



DC Fan Motor; enables smoothly balanced operation even against strong headwinds on the outdoor unit fan.



Self Diagnostic function; if a malfunction occurs, the internal microcomputer runs a self diagnosis. Inspection and repair should be performed by authorised dealers.



Green Fin; this special anti-corrosion coating on the outdoor unit improves durability.



Auto Restart function; following a power cut, settings will automatically reset to the original operating mode once power is restored.



R410A Refrigerant; non-toxic and non-flammable with zero ozone depletion.

Wall & Floor Mounted Air Conditioners

Hitachi Air Conditioners

Hitachi's range of single split air conditioners feature both wall and floor mounted systems. Hitachi have developed their air conditioners to provide exceptional heating and cooling comfort, easy operation, substantial power savings and full control for homes, apartments, shops, offices and small buildings.

Hitachi Technology

Hitachi's latest range of air conditioners demonstrate Hitachi's technological leadership, with quiet operation, high efficiency and simple controls all wrapped up in smart, compact units.

Visit www.temperzone.com.au for product information.









Your local Hitachi d	ealer:			



