



A Guide





to choosing air conditioning for your home and your lifestyle.



















The choice is simple: Hitachi and Temperzone have the right air conditioning system for your home.

Whether you live in a town house, apartment or a 100 square mansion, there's a whisper quiet, energy efficient, Hitachi or Temperzone air conditioning system to suit your home, your lifestyle and your budget.

Comprehensive Product Range

The combined Hitachi and Temperzone domestic product range is one of the largest in Australia. We have an air conditioning solution for you whether you want a small wall hung split system for a single bedroom, a Multizone system for your apartment or a fully ducted system for your free standing home.

Intelligent Technology

To ensure the best air conditioning solution for your home, location and lifestyle the Hitachi and Temperzone ranges incorporate the latest DC Inverter, Digital Scroll, Rotary and Scroll compressor technology. The range includes single and 3-phase systems from 2.5 to 27kW.

Energy Efficient

Our products are some of the most energy efficient air conditioning systems in Australia. Our complete range of air conditioning systems meet or exceed the Australian Government MEPS energy efficiency standards. All our products also meet or exceed the tougher Queensland energy efficiency standards.

Quality and Service You Can Trust

Both Hitachi and Temperzone have built their air conditioning business on the basis of exceptional quality and service. Together they have more than 75 years experience air conditioning Australia. All our domestic products are backed by full 5 year parts and labour guarantees.

National Network

Our network of Residential Dealers, branch offices and warehouses means service and spare parts are always close at hand.

So no matter where you live, or the size and style of your home and most importantly whatever lifestyle you choose, Hitachi and Temperzone have an air conditioning system which will allow you to climate control every room in your house at the touch of a button.

Inverter Wall Hung Split Systems

Simple - Flexible - Affordable







Wall Hung Split System air conditioners are a simple and affordable way to air condition single rooms or open spaces.

Wall mounted air conditioners are the most popular form of air conditioning in Australia.

The major benefits of wall mounted air conditioners are:

Cost: Wall hung split systems are cheap to buy and install.

Flexibility: You can add air conditioning to additional rooms over time.

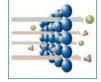
Control: Each unit has a simple to use remote control. This allows completely different temperature settings for each room.

Nano Titanium Filter*

Any microbes that manage to pass through the prefilter are captured by the Nano Titanium Air Purifying Filter and are effectively neutralised. Shuts out germs and bacteria. Hitachi's original prefilter covers the entire air inlet to prevent dust and other particles from entering.

- * Standard on RAS 50, 60, 70 & 80 Models
- * Optional on RAS 25 & 35





Conventional anti-bacterial agents



Nano Titanium



7.0kW - 8.0kW



5.0kW - 6.0kW



2.5kW - 3.5kW



High density Nano Titanium particles prevent microbes from getting through and eliminate them efficiently.

Bacteria Odours















Ducted Air Conditioning

Inverter - Digital Scroll - Premium

Climate Control for your whole home







Ducted air conditioning is the ultimate climate control solution for your whole home.

The major benefits of ducted air conditioning are:

Whole of home solution: Every room is air conditioned summer and winter.

Easy control: Central temperature and zone control with set and forget timers.

Zones: Up to 6 separate air conditioned zones give flexibility and economy.

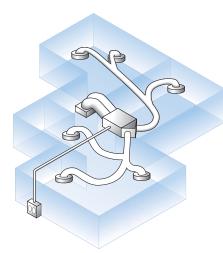
Even air distribution: No hot or cold spots in your home.

Very large range: 20 different systems are available including Inverters, Digital Scroll and Premium systems from 7 to 27kW cooling capacity. Models are available in both single and three phase. The range means there is a ducted solution for every size and style of home.

Aesthetics: With only grills mounted in ceiling or floor visible, ducted systems do not intrude into the overall look of your rooms like a wall hung unit.

Noise: With all the noise producing equipment in the ceiling, under the floor or outside, ducted air conditioning is the quietest of all air conditioning options.

Value: In most houses it is cheaper to install ducted air conditioning than to install wall hung split systems in every room. Adding ducted air conditioning also adds to the overall sale value of your home.



Ducted air conditioning is the only way to give you complete temperature control for every room in your home.















Multizone – Multi Split

Inverter Air Conditioning

The whole home solution when ductwork is a problem





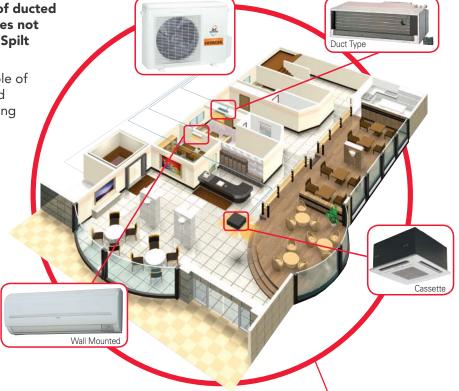


When you want the whole of home benefits of ducted air conditioning but the building structure does not allow concealed ductwork, Multizone – Multi Spilt is the solution.

Our Multizone – Multi Spilt systems allow a whole of house system run from a single outdoor unit and with central temperature controls without needing ceiling or under floor space for ductwork.

By combining a range of wall mounted, under ceiling, cassette and ducted components Multizone – Multi Spilt delivers all the benefits of ducted air conditioning in buildings with concrete slab floors and cathedral ceilings or town houses / home units where both floor and ceiling are concrete slabs. Multizone – Multi Spilt uses easily concealable refrigerant piping to replace the bulky ductwork.

Multizone – Multi Spilt is very flexible and can be configured to suit a wide variety of building designs.















SILENT OPERATION

SPACE SAVING







You're always in control

Temperzone control systems make keeping your home at the right temperature so easy. You can control the air conditioning system exactly how you want or let the control system make the decisions for you.

Controlled from a simple to use wall mounted touch pad with an LCD display panel, you can adjust the temperature, 3-speed fan or select which zones you want either heated or cooled.

Every Temperzone unit includes a 7-day programmable clock so you can come home to a comfortable home without burning energy unnecessarily when no-one is around.

On the other hand, you can let the unit do all the work for you. Temperzone's auto changeover feature means the control system decides whether to provide heating or cooling. The auto fan function decides which fan speed to select.

Control pads can be upgraded with features like multiple room controllers, remote temperature sensors and individual room temperature control.













Cooling, Heating and Energy Efficiency

Some Facts and Frequently Asked Questions







Cooling

Air Conditioning is really the only cooling option for the majority of Australian homes and offices. It is the only system that provides real climate control for your home. In addition to reducing the air temperature it reduces the humidity.

Evaporative cooling units are sometimes offered as an alternative to air conditioning. They reduce the temperature by increasing the humidity and only work in areas where humidity is normally very low. In very high humidity they don't provide any cooling at all and may actually make it feel warmer. So for more than 90% of Australians who live on the coastal fringe or in the tropics Air Conditioning is the only way to cool your home.

Heating

Reverse cycle Air conditioning is one of the most energy efficient ways to heat your home. It is more energy efficient than gas heating and much more energy efficient than a slow combustion stove or free standing electrical heaters.

Energy Efficiency

The energy efficiency of domestic air conditioning units is improving all the time. The Australian Government sets MEPS standards for air conditioning and all Hitachi and Temperzone units exceed the government standards.

There are three guides to the energy efficiency of an air conditioning system, star rating, EER and COP.

Star Ratings are given on air conditioning units for both heating and cooling. The higher the star rating the more efficient the equipment is. Star ratings are useful when comparing units of the same size.

EER and COP are efficiency ratings (EER for cooling, COP for heating) which can be used to calculate the amount of electricity required to run the system. The higher these numbers are, the better. For examples on how to work out how much a system will cost to run see the running costs calculations below.

Running Cost

Once you have decided on the air conditioning system for your home you will probably be interested to know how much it will cost to run. Actual running costs depend on the size of the unit and how much time it is operating at full load and your local electricity cost. The examples below will give you an idea of the maximum cost per hour for heating and cooling.

In the product information you have received there will be several numbers that will help you understand how much it will be to run the system for both heating and cooling.

If the data sheet has Power Input figure in kW (not the heating or cooling capacity of the unit) you simply multiply this number by your local energy cost in kWh (kilowatt hours) to give you a running cost in cents.

If the input power figure is not given you will need to divide the Cooling Capacity figure by the EER figure and then multiply this by your local energy cost.











e.g. Input power rating for a 6.0kW wall hung split system is 1.84kW. Multiply this by your local electricity cost, say 25* cents per kilowatt hour.

* Rates vary within Australia, consult your most recent electricity bill or your electricity supplier for your actual electricity tariff.

Running cost = $1.84 \times 25^* = 46$ cents per hour

For the same unit the Cooling Capacity is 6.0 divided by EER of 3.26 = 1.84

 $1.84 \times 25^*$ cents = 46 cents per hour.

For heating use the heating capacity and the COP figures instead of cooling capacity and EER.

e.g. For this unit the Heating capacity is 7.0 and the COP is 3.41

7.0 divided by 3.41 = 2.05 multiply this by your energy cost (25c*) and you get a heating mode running cost of 51.25 cents per hour.

Insulation

One of the most important ways to make you air conditioning more efficient is to properly insulate your home. Properly designed and installed insulation will significantly reduce both the heating and cooling load on your home. This means your air conditioning system will be needed less often and use less electricity when it's on. So before you install an air conditioning system make sure your insulation is up to scratch. This will save you money in running costs but may also save you money in system cost as a smaller unit may be satisfactory after the insulation is installed.

Doors and Windows

There is nothing nicer than to open the windows and doors on a day when the temperature is in the mid 20's.

However, if you leave the windows and doors open when it's very hot or cold and the air conditioning is on it makes the air conditioning system run longer and work harder. Leaving windows and doors open in hot or cold weather is a bit like pouring money out the window because all you are doing is heating or cooling the outside air.

Windows are a major source of heat gain or loss from a house even when they are closed so close fitting curtains and blinds help keep your house cooler in summer warmer in winter.

Noise

The outdoor units of all air conditioners are noisy. Careful location of the outdoor unit is important to ensure that your new air conditioning system does not cause a neighbourhood noise problem.

R410A

Both Hitachi and Temperzone air conditioning systems use R410A refrigerant, which both increases the energy efficiency of the compressor and also has an Ozone Depletion Potential of 0.00







Product Range Overview

Air Conditioning for Every Home and Lifestyle







Specifications: Inverter Split System Reverse Cycle

Model: Indoor Unit	RAS-25YHA2	RAS-35YHA3	RAS-50YHA2	RAS-60YHA2	RAS-70YHA2	RAS-80YHA2
Model: Outdoor Unit	RAC-25YHA2	RAC-35YHA3	RAC-50YHA2	RAC-60YHA2	RAC-70YHA2	RAC-80YHA2
CAPACITY						
Cooling Capacity (kW)	2.5	3.5	5.0	6.0	7.0	8.0
Heating Capacity (kW)	3.4	4.2	6.1	7.0	8.3	9.3
EER Cooling / COP Heating	3.37 / 3.98	3.48/ 3.96	3.31 / 3.60	3.14 / 3.17	3.30 / 3.30	3.04 / 3.03
Star Rating Cool / Heat	**/***	**/***	**/***	**/**	**/**	**/**











Specifications: Ducted Air Conditioning Inverter and Digital

Model: Indoor Unit	RPI-3.OFSN1S/Q	RPI-4.OFSN1S/Q	RPI-5.OFSN1S/Q	RPI-6.OFSN1S/Q	RPI-7.OFSN1S/Q	ISD-135-K	ISD-230-K		
Model: Outdoor Unit	RAS-3HVRNS	RAS-4HVRNS	RAS-5HVRNS	RAS-6HVRN	RAS-7HVRNS	OSA135RKSHG	OSA230RKTHG		
CAPACITY									
Cooling Capacity (kW)	7.1	9.9	12.5	15.7	18.0	13.5	23.0		
Heating Capacity (kW)	7.6	10.8	13.6	15.2	18.6	12.4	22.2		
EER Cooling / COP Heating	2.94 / 3.21	2.79 / 3.4	2.9 / 3.55	2.52 / 3.52	2.93 / 3.40	2.96 / 3.31	3.31 / 3.63		

Specifications: Ducted Air Conditioning Premium Single Phase

Model: Indoor Unit	ISD-83K-DN	ISD-96K-DN	ISD-110K-DN	ISD-135K-DN	ISD-156K-DN	ISD-156K-DN			
Model: Outdoor Unit	OSA-83RKSH	OSA-95RKSH	OSA-110RKSH	OSA-140RKSH	OSA-156RKSV	OSA-156RKSH			
CAPACITY									
Cooling Capacity (kW)	8.46	9.35	10.6	12.95	14.76	14.95			
Heating Capacity (kW)	7.9	8.4	9.9	13.0	13.63	14.8			
EER Cooling / COP Heating	2.9 / 3.02	2.92 / 3.02	2.9 / 2.95	3.05 / 3.51	2.96 / 3.37	3.05 / 3.81			







Specifications: Ducted Air Conditioning Premium Three Phase

Model: Indoor Unit	ISD-110K-DN	ISD-135K-DN	ISD-156K-DN	ISD-156K-DN	ISD-200K-DN	ISD-200K-DN	ISD-230K-DN	ISD-270K-DN
Model: Outdoor Unit	OSA-110RKTH	OSA-140RKTH	OSA-156RKTV	OSA-156RKTH	OSA-200RKTH	OSA-200RKTV	OSA-230RKTH	OSA-270RKTH
CAPACITY								
Cooling Capacity (kW)	10.6	12.95	14.76	14.95	18.2	18.2	21.73	25.86
Heating Capacity (kW)	10.3	13.0	13.63	14.8	17.3	17.3	22.1	25.3
EER Cooling / COP Heating	2.9 / 2.93	3.05 / 3.51	2.96 / 3.37	3.05 / 3.81	2.93 / 3.5	2.93 / 3.5	3.18 / 3.63	3.06 / 3.48









Specifications: Multizone Inverter Systems

(Number of Connectable Indoor Units)	2	3	4	5	6					
Model: Outdoor Unit	RAM-55QHA1	RAM-65QHA1	RAM-72HA1	RAM-90QHA1	RAM-130QHA1					
CAPACITY										
Cooling Capacity (kW)	4.54	6.3	7.1	9.0	12.6					
Heating Capacity (kW)	7.2	7.2	8.6	11.0	14.4					
EER Cooling / COP Heating	** 3.33 / 4.09	** 3.33 / 3.79	** 4.34 / 3.94	** 5.07 / 4.47	** 3.21 / 3.79					

^{**} Maximum dependent on Indoor Unit Selected

MEPS Rated Capacity, AS3823

For more detail visit www.temperzone.com.au

Notes:

- Cooling capacity are based upon, Indoor air temperature 27°C D.B 19°C W.B, Outdoor entering air temperature 35°C D.B.
- Heating capacity are based upon, Indoor air temperature 21°C D.B, Outdoor entering air temperature 7.0°C. Dry Bulb / 7.0°C Wet Bulb
- Outdoor sound levels are the average sound pressure level at 3 metres, unless it has # symbol represents sound pressure level at 1 metre.
- Materials and specifications are subject to change without notice due to the manufacturer's ongoing research and development program.

Our Guarantee is your Peace of Mind



Comprehensive 5 year warranty*

Temperzone stands behind the quality built into its products. Every unit installed by a Temperzone Preferred Contractor is covered by a 5 year factory warranty.

* Conditions apply – see warranty for details.

Sales and Service

For all warranty issues please contact your Temperzone Hitachi Residential Dealer who will arrange for prompt attention to your claim.

Please note - All Hitachi air conditioning warranty related matters within Australia are managed by Temperzone Australia.

See www.temperzone.com.au for more information.





temperzone australia pty ltd

Head Office, Sydney: 7A Bessemer Street

PO Box 6448, Delivery Centre, Blacktown NSW 2148, Australia

Email: sales@temperzone.com.au

Sydney: (02) 8822 5700 **Brisbane:** (07) 3308 8333 (03) 6272 0066 Adelaide: (08) 8376 1505 **Hobart: Newcastle:** (02) 4962 1155 Perth: (08) 9314 3844 Melbourne: Townsville: (03) 8769 7600 (07) 4773 9566

www.temperzone.com.au www.hitachiaircon.com.au



