HITACHI

## 4-way Ceiling Cassette

Cooling & Heating



## Creating truly comfortable living spaces.

We want to help you find the air conditioner that best suits your lifestyle. Our partnership with **temperzone** combines innovative global products with local knowledge and support to meet your needs faster, smarter and more responsibly than ever before.



WIDE AMBIENT OPERATING RANGE RCI / RAS: -20°C – 46°C RAI / RAS: -15°C – 46°C

CONTROL

YEARS

6 YEAR WARRANTY

4 WAY AIR FLOW (X) \_\_\_\_\_

FRESH AIF





## Delivering big results for small spaces

When commercial spaces are limited, there's only one climate control solution that offers you the power to customise usage.

Incorporating DC technology, our cassette range features inverter control and the ability to achieve superior operating efficiency.

Ranging in Cooling capacity from 5kW to13kW the range delivers the level of comfort, convenience, and reliability that you've come to expect from Hitachi.

4-way airflow cassettes are an economical and effective way of air conditioning open areas with high occupancy or traffic, such as shops, walkways, and restaurants.



FLEXIBLE DESIGN



EASY MAINTENANCE



**AUTO RESTART** 



4-WAY CASSETTE



INDIVIDUAL LOUVER CONTROL

RCI models capable of individual louver control



CONTROL

Stylish local controllers. Auto restart function. Connection to VRF central controllers.



WARRANTY COMMERCIAL AND RESIDENTIAL

## The flexibility of a Hitachi cassette

One of the most compact cassettes on the market 570 x 570mm. The mini cassette can be embedded within one ceiling tile total dimension with fasia panel is 620X620mm. Lights or other installations are able to be installed in the adjoining ceiling tiles.

### COMPACT 4-WAY CASSETTE (RAI) R32

With a height of only 285mm, these cassettes are some of the smallest on the market.

Standard wall controller:

SPX-WKT controller

**R**32





## 4-WAY CASSETTE (RCI) R410

Overall dimension of 840X840mm and height of 298mm.

Standard wall controller:

PC-ARF controller



Ceiling Cassette Systems



### STANDARD TO HIGH CEILING APPLICATION

These models are designed for standard to high ceiling applications.

#### **EFFICIENT DRAIN PUMP**

Equipped with an automatic drain pump, compact cassettes can lift water from the condensate drain pan up to 600mm.

#### **FEATURES AND BENEFITS**

- Compact models making them Ideal for small to medium sized commercial areas such as offices, restaurants and retail.
- The new panel is fully embedded within one ceiling tile. Lights or other installations are able to be installed in the adjoining ceiling tiles.
- High heating capacities at low temperatures.
- Cooling & Heating capacities from 5.0kW to 13.0kW cooling.

- Each louver of the cassette can be individually controlled for a comfortable air flow and an adaptability to all room configurations.
- All Hitachi's units offer high seasonal efficiencies.
- Larger models pre-charged to 30m.

#### **CONTROLLERS**

- Large screen and simplified button layout.
- Controls temp, mode, fan speed, etc.
- 7-day timer with multiple set points.
- Multiple units can be operated with one controller.
- Room name and service company name programmable .
- Help menus and error code diagnosis.
- Eco mode (SPX-WKT3).
- Room temperature display.



**SPX-WKT** 

RAI Models only



PC-ARF

RCI Models only

## Powerful and Flexible



High air flow, up to 4.2m on larger RCI models.

#### **NEW ANTIBACTERIAL AGENT\***

An internal low-voltage drain pump removes accumulated condensate from the drain pan, even during unit operation. A float switch monitors the water level and automatically activates the pump as necessary. A silver ion antibacterial agent inhibits slime build-up, while a larger drain diameter assists in more efficient drainage.

\*Only applicable to RCI models.

#### **SILKY FLOW LOUVER**

The new structured silky flow louver is designed to reduce the discomfort caused by temperature irregularity and cold drafts. Individual control setting for each louver is available.

#### **ONE-TOUCH PANEL**

The unit has an easy one-touch panel so that the filter can be removed for cleaning.



#### **MOTION SENSOR\***

Designed to detect the amount of human activity within a particular space, the motion sensor is an integral component of the optional energy-saving technology. It maintains a comfortable indoor environment by automatically adjusting the airflow volume, direction and temperature according to the amount of activity. Savings can be further improved with individual operating function. In addition, operation can also be ceased automatically if a space remains unoccupied for more than 30-minutes.

\*Optional panel. Only applicable to RCI models.

Antibacterial low voltage drain pump





\*RCI models are 75mm.

## Demand Control Technology

Already highly efficient, Hitachi Premium Inverter models offer two additional ways to configure systems to achieve even greater energy savings.

#### **SELF-DEMAND CONTROL\***

Power consumption levels (as a percentage of the maximum) can be selected in advance. Following an external command during operation, the system will automatically detect the amount of power being used and limit itself to the predetermined amount during peak power usage periods.

\* RCI / RAS models.

#### **WAVE MODE**

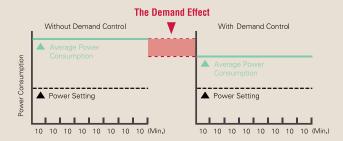
When activated by an external command, this function cycles the system between full-power and a pre-selected reduced power setting every 10 to 20-minutes until the command is cancelled. Wave Mode results in lower average power usage and cost savings.

#### **FRESH AIR\***

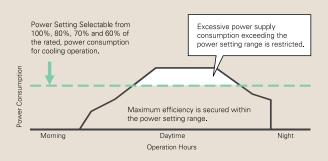
Our range is designed to accept external air and mix it with conditioned air to ensure that there's always a percentage of fresh air supplied to a conditioned space.

\*Only applicable to RCI models.

#### Wave Mode (DRED)



#### **Self-Demand Control**





#### DC INVERTER TECHNOLOGY

A DC compressor offers improved performance during periods of extended operation. It also features a split rotor with displaced electrical poles, enabling the suppression of electromagnetic noise. Low-speed performance characteristics have also been improved, leading to significant reductions in annual running costs.

#### PRECISE INVERTER CONTROL

The operating speed of the compressor's DC motor can be adjusted continuously in 1Hz increments and in free relation to the variability of system capacity.

#### STYLISH REMOTE CONTROLLERS

Our fully-programmable centralised 7-day timer offers you the ability to switch all units on and off automatically to conserve power when rooms are unoccupied.

Indoor units are able to accept external control inputs such as remote stop/start, fire alarm, and external thermostat. System outputs including fault conditions, mode (heat/cool), and thermostat on are also available.



Controller for RCI models (PC - ARF1).

#### SLITLESS FIN HEATING PERFORMANCE

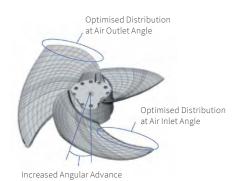
The revolutionary heat exchange design featuring slitless fin surface improves water removal, thereby leading to reduced frosting and improved heating performance under low heating temperature conditions.

#### **INSTALLATION AND FLEXIBILITY**

Changing the way that everybody thinks about twin, triple and quad split configurations, the IVX is the perfect choice for installations requiring individual unit control. Facilitation and installation flexibility are further achieved due to the outdoor unit's lightweight, compact design.

#### QUIET OPERATION -SUPER HIGH-STREAM FAN

Advancements in the blade design and optimisation of the inlet and outlet angles have led to a 9% increase in efficiency while still maintaining low operating noise levels.







# H-Link II is a unique Hitachi communication system that can control multiple outdoor and indoor units from one location.

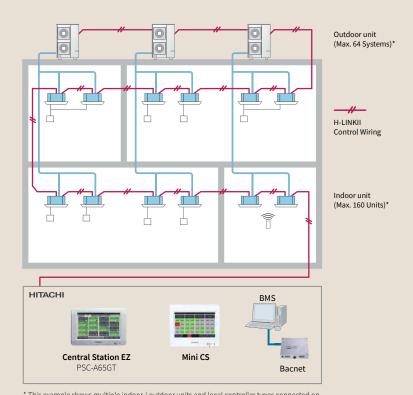
It simplifies commissioning and service maintenance for installers and service engineers, and enables owners and occupiers to enjoy better system management through the ability to connect various types of central control options.

Hitachi VRF, split systems, chillers and even wall mounts (via an interface card) can be connected to H-Link II.

#### **INTELLIGENT CONTROLS**

Hitachi offers a range of LCD wall-mounted and handheld controllers suited to both commercial and residential applications.

Applicable to RCI models only.



 $<sup>^{\</sup>star}$  This example shows multiple indoor / outdoor units and local controller types connected on the same H-Link system, with a choice of central controller.

#### 1

# Ceiling Cassette Systems

## Features and options comparison table

	COMPACT 4-WAY CASSETTE (RAI) R32 5.0 - 6.0kW	4-WAY CASSETTE (RCI) R410 7.1-13kW
Silky flow louver	•	•
One touch panel	•	•
Efficient drain pump	•	•
Motion sensor / Human sensor	-	
Fresh Air	-	
H-Link II system		•
PC-ARF wired controller	-	
SPX-WKT wired controller	•	_
SPX-RCDB wired controller (simplified)		-
SPX-RCKA3 controller (infra red)		-
Remote Stop / Start Accessory		

- STANDARD
- OPTIONAL
- NOT AVAILABLE

# 4 Way Cassette (One-to-One) Comparison Chart

Model - Indoor / Outdoor Unit	RAI-E50 / RAC-E50YHA	RAI-E60 / RAC-E60YHA	
General Specifications			
Capacity (kW)			
Cooling Capacity Cooling Capacity Range Heating Capacity Heating Capacity Range	5.0 1.2 - 5.8 6.0 1.2 - 6.5	6.0 1.2 - 6.5 7.0 1.2 - 8.0	
Energy Efficiency			
EER / AEER COP / ACOP	3.5 / 3.48 3.87 / 3.85	3.42 / 3.40 3.61 / 3.59	
Air Flow (l/sec)			
UHi / Hi / Med / Low	216/191/166/125	216/191/166/125	
Dimensions			
Indoor Unit: (H x W x D mm) (Height excludes fascia panel) Outdoor: (H x W x D mm) Weights: Indoor kg / Outdoor kg	285 x 570 x 570 750 x 850 x 298 17 / 50	285 x 570 x 570 750 x 850 x 298 17 / 50	
Sound Pressure Level (dB(A))			
Indoor Unit (UHi / Hi / Med / Low) Outdoor Unit (Cool / Heat / Night) Sound Power	43/39/35/29 50/53/- 63	43/39/35/29 50/53/- 63	
Working Range (°C db)			
Cooling Heating		-10°/46°C	
Fascia Panel Model Wired Controller (Standard) Infrared Controller / Receiver (Optional) 3 Way Outlet kit (Optional) Fresh Air Inlet (Optional) Remote Input / Output Plug (Optional) HI Link Adaptor		FANDARD PANEL P - AP56NAM  SPX - WKT  SPX - RCKA2  N / A  N / A  SPX - WCD8  PSC - 6RAD	
Piping			
Pipe Connection Sizes: Liquid Ømm / Gas Ømm Max Pipe Length (m) Max Pre Charged Length (m) Max Pipe Lift (m) Refrigeration Connections (Indoor / Outdoor)		6.35 / 12.70 30 30 20 Flare Nut / Flare Nut	
Electrical			
Power Supply Outdoor Unit Max Current (Amps)	10.5	AC 1 Ph 220 - 240V 50Hz	

#### NOTES:

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RCI-3.0FSN3 / RAS-3HVNC	RCI-4.0FSN3 / RAS-4HVNC1	RCI-5.0FSN3 / RAS-5HVNC1	RCI-6.0FSN3 / RAS-6HVNC1
7.1	10.0	12.5	13.0
3.2 - 8.0	4.5 - 11.2	5.7 - 14.0	6.0 - 16.0
8.0	11.2	14.0	16.0
3.5 - 10.6	5.0 - 14.0	5.0 - 18.0	5.0 - 20.0
3.48 / 3.33	3.72 / 3.55	3.29 / 3.12	3.15 / 3.00
3.70 / 3.52	4.51 / 4.25	3.84 / 3.63	3.61/3.44
450/383/300/233	617/517/400/333	617/550/443/350	617/583/467/367
298 x 840 x 840	298 x 840 x 840	298 × 840 × 840	298 x 840 x 840
600 x 792 x 300	1140 x 950 x 370	1140 x 950 x 370	1140 x 950 x 370
26 / 44	26 / 79	26 / 89	26 / 89
25, 11	20, 13	20703	20 / 03
42/36/32/28	48 / 43 / 39 / 33	48 / 45 / 40 / 35	48/46/41/37
48 / 50 / 46	52/54/50	52/54/50	55/57/53
<b>-</b>	-5°/46	°C	
<b> </b>	-20° / 15°	C	
	AP160NA1 (Std - Exc Motion Sensor) / P-A		
<b>+</b>	PC-AWR/PC-	- ALH3	
<b>+</b>	PI-160LS	1	
	PD-75A		
<u> </u>	PCC-1A		
9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88
50	70	75	75
20	30	30	30
<b>+</b>		re Nut	
	Flare Nut / Fla	e nut	
ļ	AC 1 Ph 220 - 240	V 50Hz	



#### temperzone Ltd

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**6 YEAR WARRANTY ON PARTS AND LABOUR\*** 



6 YEAR WARRANTY

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\* Refer to NZ Hitachi Warranty for full conditions