

# DC Inverter Ducted Packaged Air Conditioning Systems

It's more than air conditioning, it's a way of life

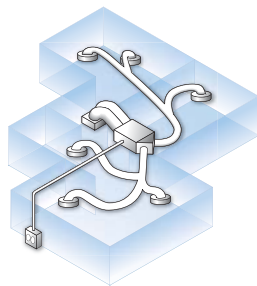


The Hitachi's DC Inverter Utopia range of air conditioners distribute clean air more efficiently and quietly to ensure maximum room comfort.

Our components are stringently tested to match Hitachi's quality policy, ensuring flawless operation year after year.

## Zoning

Using external controls ducted systems can be programmed into different zone areas. You can choose to condition only the zones you select.



## Peace and quiet

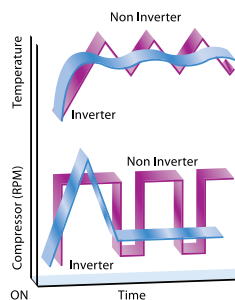
The beauty of Hitachi's DC Inverter systems is their quiet operation. The innovative, noise-reduction technology offers low operating sound levels, low vibration and more important – reliability.

Subtle outlet vents deliver cool or warm air, ducted throughout your home to maintain a constant temperature. The indoor unit can be easily installed out of sight, in the ceiling or under the floor, resulting in a hard working efficient system that is amongst the quietest on the market.

## Power saving DC Inverter

Inverter technology allows a room to reach the required temperature more rapidly and up to 30% more efficiently than Constant Speed systems.

It also eliminates the frequent stopping and starting often required by standard systems in order to maintain consistent temperature conditions.



## Intelligent controls

Hitachi style flows through to the sleek, LCD wall-mounted controls which reflect the sophistication of the DC Inverter systems. The intelligent Check Mode analyses the system's diagnostic functions for quick, efficient servicing.

Multiple control options include, wired wall mounted, infrared remote, 7 day timer, central station and network controllers.



## Reliable and built to last.

All models feature: strong, durable, ruggedly built casings, heavy-gauge, aluminium heat exchanger coils, copper tubing and brass fittings. All models are robustly constructed and utilise direct drive fan assemblies with lubricated bearings for extended motor life.



\* Five Year Warranty: Terms and conditions apply

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QUALITY AIR CONDITIONING

# SPECIFICATIONS: UTOPIA - DC INVERTER UNITS. HVRN SERIES DUCTED UNITS

Model: Indoor Unit Model: Outdoor Unit	RPI-3.0FSN1SQ RAS-3HVRNS	RPI-4.0FSN1SQ RAS-4HVRNS	RPI-5.0FSN1SQ RAS-5HVRNS	RPI-6.0FSN1SQ RAS-6HVRN	RPI-7.0FSN1SQ RAS-7HVRN
<b>Capacity</b>					
Cooling Capacity (kW)	7.1	9.9	12.5	15.7	18.0
Range ( kW )	3.9 - 8.0	4.9 - 11.2	5.7 - 14.0	6.7 - 16.0	8.1 - 20.0
Heating Capacity (kW)	7.6	10.8	13.6	15.2	18.6
Range (kW)	4.0 - 9.0	5.0 - 12.5	6.0 - 16.0	6.7 - 16.0	8.1 - 20.0
Compressor Type	Scroll	Scroll	Scroll	Scroll	Scroll
<b>Electrical</b>					
Power Supply (V/Ph)	240 / 1	240 / 1	240 / 1	240 / 1	240 / 1
Power Supply (Hz)	50	50	50	50	50
Power Supply to	OU / IU	OU / IU	OU / IU	OU / IU	OU / IU
Communication Interconnecting Wires	2 Core 0.75m2 Shielded	2 Core 0.75m2 Shielded	2 Core 0.75m2 Shielded	2 Core 0.75m2 Shielded	2 Core 0.75m2 Shielded
Input Current (Cooling) RNC / MAX (A)	10.3 / 18	14.7 / 22	18.5 / 31	26.2 / 29	26.0 / 31
Input Current (Heating) RNC / MAX(A)	10.8 / 18	14.2 / 22	18.0 / 31	20.3 / 29	25.7 / 31
Recommended ELB Size - ODU	25	32	40	31	40
<b>Efficiency</b>					
Input kW (Cooling)	2.4	3.5	4.4	5.4	5.9
Input kW (Heating)	2.4	3.1	3.8	4	5.5
EER Cooling / COP Heating	2.94 / 3.17	2.84 / 3.58	2.84 / 3.58	2.91 / 3.80	3.05 / 3.38
<b>Airflow</b>					
Fan Speeds	3	3	3	3	3
Ex Static Range (pa)	70 - 120	70 - 120	70 - 120	70 - 120	140
Air Flow (L/s) Hi / Med / Low	517 / 450 / 333	617 / 550 / 417	800 / 717 / 567	933 / 833 / 667	1083 / 933 / 766
<b>Dimensions &amp; Weights</b>					
Dimensions IU (H x W x D mm)	350 / 1076 / 800	350 / 1076 / 800	350 / 1300 / 800	350 / 1300 / 800	440 / 1430 / 550
Weight IU (Kg)	52	57	61	63	75
Dimensions OU (H x W x D mm)	600 x 792 (+95) x 300	800 x 950 x 370	800 x 950 x 370	1240 x 950 x 315	1650 x 1100 x 390
Weight OU (Kg)	44	85	89	97	167
<b>Noise Levels</b>					
Sound Pressure Level IU (dB)a Hi / Med / Low	45 / 43 / 39	47 / 44 / 40	48 / 45 / 42	52 / 48 / 44	51 / 47 / 42
Sound Pressure Level OU (dB) Cool (Night) Heat	48 (46) 50	50 (48) 52	52 (50) 54	48 (44) 50	53 (50) 54
<b>Installation</b>					
Refrigerant Type	R410A	R410A	R410A	R410A	R410A
Pipe Connection Sizes: Gas (mm) (in)	15.88 / 5/8	15.8 / 5/8	15.8 / 5/8	15.8 / 5/8	19.05 / 3/4
Pipe Connection Sizes: Liquid (mm) (in)	9.53 / 3/8	9.53 / 3/8	9.53 / 3/8	9.53 / 3/8	9.53 / 3/8
Refrigerant Pipe Charge Length (Mtrs)	20	20	30	30	20
Max Pipe Length (Mtrs)	30	50	50	77	50
Max Pipe Lift (Mtrs)	30 / 20	30 / 20	30 / 20	30 / 20	30 / 20
Pipe Connection Methods	Flare	Flare	Flare	Flare	Flare
<b>Working Range</b>					
Outdoor Operating Temp (Cooling) OC dB	-5 - +46	-5 - +46	-5 - +46	-5 - +43	0 - +46
Outdoor Operating Temp (Heating) OC WB	-10 - +15	-10 - +15	-10 - +15	-15 - +15	-8 - +15

NOTES: 1. The nominal cooling 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) 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)  
Published capacities based on Piping Length: 7.5 Metres.

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

**Indoor Units:** 1.5 Metres beneath the unit with discharge duct (2.0m) and return duct (1.0M)

**Outdoor Units:** 1 Metre from the unit service cover surface, and 1.5 metres from floor level.

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

## Optional Parts

In-the-ceiling Type	RPI-3.0FSNIS, RPI-5.0FSNIS RPI-4.0FSNIS, RPI-6.0FSNIS	RPI-7.0FSNIS
Drain Mechanism Kit	DUPI-162S	-
Receiver Kit for Wireless Control	PC-ALHZ	
<b>Outdoor Units</b>	RAS-3HRVNS, RAS-5HRVNS, RAS-7HRVN, RAS-4HRVNS, RAS-6HRVN	
Drain Kit	DBS-26	

## DEALER DETAILS

Control Systems	Models
Remote System Controller	PC-AR(T) <sup>*1</sup>
Wireless Remote System Controller	PC-LH3A
Half-size Remote System Controller	PC-ARH
7-Day Timer	PSC-A1T
Central Station	PSC-5S or PSC-A64S
Remote Control Cable	PRC-5K, PRC-10K, PRC-15K for PC-AR(T)
3P Connector Cable	PCC-1A
P/C Network System	CS-NET

Note: \*1. As the PC-AR(T) does not include a remote control cable, prepare it in the field, or use PRC-5K, 10K or 15K.

DC Inverter systems are designed for efficiency in compliance with MEPS II standards. Efficiency ratings in this table are based on physical test data. Materials and specifications are subject to change without notice due to the manufacturer's ongoing research and development program. Specification details provided in this brochure are indicative only. Please refer to the Hitachi Design and Installation manuals for all technical information.