

# TOSHIBA

Leading Innovation >>>



When technology meets comfort  
Inverter ducted system

# RESIDI

## The brand.

Toshiba Air Conditioning delivers products known for their technological innovation and artistry, leading to comfortable living and greater peace of mind.

## Inventor of the inverter.

The Digital Inverter from Toshiba combines economy and efficiency in a smart body. It offers exceptional technology, energy savings, high efficiency, high performance, easy installation and flexible control.

## Solution from professionals.

Toshiba Digital Inverter air conditioners combine exceptional energy savings and operational features in an extremely compact unit.

## High static pressure.

External static pressure can be raised as high as 250 Pa, so that all areas of the room can be reached for even temperature distribution, no matter how complex the layout.

## High-lift drain pump.

The flexible piping layout is made possible by an optional drain-pump kit with a vertical lift of up to 330mm.

## Remote controllers.

Toshiba Digital Inverters & Super Digital Inverters operate with easy to use remote controller.



Wired remote controller  
RBC-AMT32E



Simple wired remote controller  
RBC-AS21E2



Wired remote controller  
with integrated weekly timer  
RBC-AMS41E

## The mission – improved air quality

Comfort in home means much more than controlling temperature. Toshiba air conditioners are designed to minimise air pollutants.

## Care for users

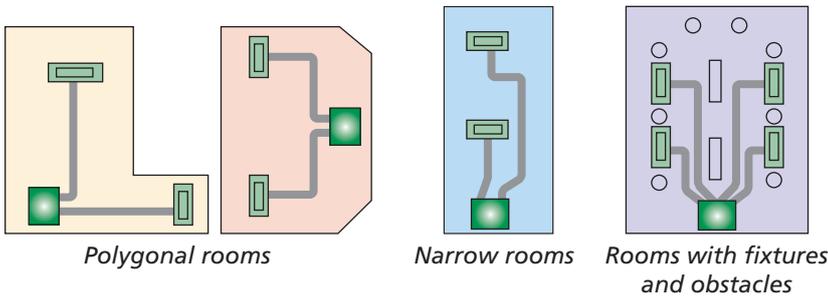
The benefit of Toshiba's refined design include flexibility in application, low operating sound level, improved air quality and all round comfort which is a result of the precise temperature control by inverter technology.



## Versatile and clever - high static duct type.

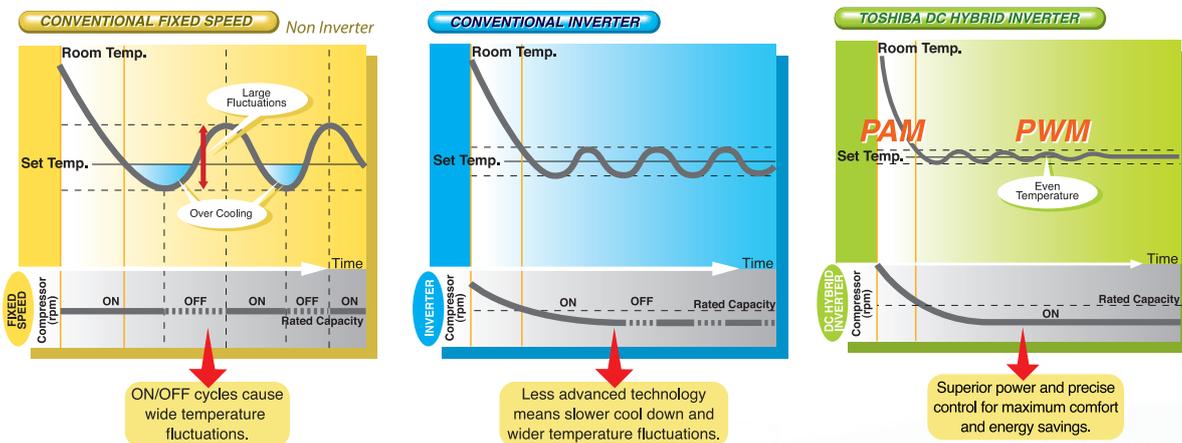
### Wide range of applications.

The use of ducts allows air outlets to be conveniently installed anywhere on the ceiling, eliminating the conspicuous presence of the air conditioner in the centre of the room. Not only can this be applied to a wide variety of layouts from narrow spaces to polygonal rooms; it also greatly improves the aesthetics of a room with its unobtrusive presence.



### Optimum comfort and energy saving.

Inverter technology is the latest technology available in air conditioners. The Toshiba DC Hybrid inverter generates more power and has precise control for maximum comfort.



Toshiba has combined two technologies, creating the "DC Hybrid Inverter" that automatically chooses the better of the two control methods based on the actual conditions at the time. This solution provides high capacity only and when it is necessary.

On very cold winter days, or hot summer days the Toshiba DC Inverter uses the PAM (Pulse Amplitude Modulation) method, and for very low energy consumption, when conditions are less severe uses the PWM (Pulse Width Modulation) method.

Given that maximum capacity is not often required, and that high efficiency is always desirable, the result is a greatly reduced annual energy consumption.



## Technical specifications - Concealed Duct High Static Pressure Type

Indoor Outdoor			RAV-SM1103DT-A RAV-SP1104ATE	RAV-SM1403DT-A RAV-SP1404ATE	RAV-SM1603DT-A RAV-SM1603ATE
Refrigerant Type			R410A	R410A	R410A
Power Supply		Volts-Phase-Hz	240 / 1 / 50	240 / 1 / 50	240 / 1 / 50
Cooling	Capacity - Rated (min ~ max)	kW	10.40 (3.30 ~ 12.10)	13.00 (3.30 ~ 14.10)	14.30 (3.60 ~ 16.00)
	Efficiency - Rated (min ~ max)	EER	3.30 (3.03 ~ 3.66)	3.01 (2.83 ~ 3.67)	2.77 (2.66 ~ 2.85)
	Power input - Rated (min ~ max)	kW	3.15 (0.90 ~ 3.99)	4.32 (0.90 ~ 4.98)	5.01 (1.30 ~ 6.01)
	Operating Current - Rated (min ~ max)	A	13.50 (4.00 ~ 17.10)	18.60 (4.00 ~ 21.40)	21.50 (5.70 ~ 25.80)
Heating	Capacity - Rated (min ~ max)	kW	11.30 (4.20 ~ 15.00)	14.00 (4.20 ~ 18.00)	16.00 (4.60 ~ 18.00)
	Efficiency - Rated (min ~ max)	COP	4.38 (3.51 ~ 5.25)	4.14 (3.67 ~ 5.25)	3.50 (2.54 ~ 3.65)
	Power Input - Rated (min ~ max)	kW	2.58 (0.80 ~ 4.84)	3.38 (0.80 ~ 4.91)	4.57 (1.26 ~ 7.08)
	Operating Current - Rated (min ~ max)	A	11.10 (3.50 ~ 21.50)	14.50 (3.50 ~ 21.10)	19.60 (5.60 ~ 30.4)
Indoor Unit	Dimension (HxWxD)	mm	380 x 1050 x 600	380 x 1050 x 600	380 x 1050 x 600
	Net Weight	kg	57	57	57
	Airflow Volume	L/s	694 <sup>(1)</sup>	916	972
	Static Pressure - Std (Max)	Pa	100 (225)	100 (250)	100 (250)
	Moisture Removal (Cooling)	L/hr	2.00	3.10	3.80
	Fan Motor Output	W	400	400	400
	Cooling - (Sound Pressure) (H) at 1m distance	dBA (@spl)	49	49	50
	Cooling - (Sound Power) (H)	dBA (@swl)	64	64	65
	Heating - (Sound Pressure) (H) at 1m distance	dBA (@spl)	49	49	50
	Heating - (Sound Power) (H)	dBA (@swl)	64	64	65
	Cooling Usable Temperature Range	°C	21 ~ 32	21 ~ 32	21 ~ 32
	Heating Usable Temperature Range	°C	15 ~ 28	15 ~ 28	15 ~ 28
	Outdoor Unit	Dimension (HxWxD)	mm	1340 x 900 x 320	1340 x 900 x 320
Net Weight		kg	93	93	99
Compressor Type			DC Twin Rotary	DC Twin Rotary	DC Twin Rotary
Fan Motor Output		W	100+100	100+100	100+100
Cooling - (Sound Pressure) (H) at 1m distance		dBA (@spl)	49	51	51
Cooling - (Sound Power) (H)		dBA (@swl)	66	68	68
Heating - (Sound Pressure) (H) at 1m distance		dBA (@spl)	50	52	53
Heating Operating Noise (Sound Power) (H)		dBA (@swl)	67	69	70
Cooling Usable Temperature Range		°C	-15 ~ 43	-15 ~ 43	-15 ~ 43
Heating Usable Temperature Range		°C	-20 ~ 15	-20 ~ 15	-15 ~ 15
Pipe Size		Liquid Line Ø	mm/inch	9.52 / 3/8"	9.52 / 3/8"
	Gas Line Ø	mm/inch	15.87 / 5/8"	15.87 / 5/8"	15.87 / 5/8"
	Coupler Style		Flare	Flare	Flare
	Drain (Inside Diameter) Ø	mm	25	25	25
	Maximum Length	m	75	75	50
	Chargeless Length	m	30	30	30
	Maximum Height Difference	m	30	30	30

<sup>(1)</sup> using Med fan tap (High static pressure tap can not be available.)

Indoor Outdoor			MMD-AP0721H MMY-MAP0801HT8	MMD-AP0961H MMY-MAP1001HT8	
Refrigerant Type			R410A	R410A	
Cooling	Capacity - Rated	kW	22.40	28.00	
	Efficiency - Rated	EER	3.26	3.13	
	Power input - Rated	kW	6.87	8.94	
	Operating Current - Rated	A	10.44	13.58	
Heating	Capacity - Rated	kW	25.00	31.50	
	Efficiency - Rated	COP	3.53	3.41	
	Power Input - Rated	kW	7.08	9.23	
	Operating Current - Rated	A	10.76	14.02	
Indoor Unit	Power Supply	Volts-Phase-Hz	240 / 1 / 50	240 / 1 / 50	
	Dimension (HxWxD)	mm	470 x 1380 x 1800	470 x 1380 x 1800	
	Net Weight	kg	150	150	
	Cooling Airflow Volume (H/L)	L/s	1000 at 137Pa	1167 at 137Pa	
	Static Pressure - Std (Max)	Pa	137 (196)	137 (196)	
	Fan Motor Output	W	370 x 3	370 x 3	
	Cooling - (Sound Pressure) (H) at 1m distance	dBA (@spl)	49	50	
	Cooling - (Sound Power) (H)	dBA (@swl)	64	65	
	Heating - (Sound Pressure) (H) at 1m distance	dBA (@spl)	49	50	
	Heating - (Sound Power) (H)	dBA (@swl)	64	65	
	Cooling Usable Temperature Range	°C	21 ~ 32	21 ~ 32	
	Heating Usable Temperature Range	°C	15 ~ 28	15 ~ 28	
	Outdoor Unit	Power Supply	Volts-Phase-Hz	415 / 3 / 50	415 / 3 / 50
Dimension (HxWxD)		mm	1800 x 990 x 750	1800 x 990 x 750	
Net Weight		kg	258	258	
Compressor Type			DC Twin Rotary	DC Twin Rotary	
Fan Motor Output		W	600	600	
Cooling - (Sound Pressure) (H) at 1m distance		dBA (@spl)	57	58	
Cooling - (Sound Power) (H)		dBA (@swl)	72	73	
Heating - (Sound Pressure) (H) at 1m distance		dBA (@spl)	57	57	
Heating Operating Noise (Sound Power) (H)		dBA (@swl)	72	72	
Cooling Usable Temperature Range		°C	-5 ~ 43	-5 ~ 43	
Heating Usable Temperature Range		°C	-15 ~ 15	-15 ~ 15	
Pipe Size		Liquid Line Ø	mm/inch	12.70 / 1/2"	12.70 / 1/2"
		Gas Line Ø	mm/inch	22.20 / 7/8"	22.20 / 7/8"
	Coupler Style		Flare	Flare	
	Drain (Inside Diameter) Ø	mm	25	25	
	Maximum Length	m	150	150	
	Chargeless Length	m	12.50	12.50	
	Maximum Height Difference	m	50	50	

Rated Conditions: Cooling; Indoor 27°C DB/19°C WB, Outdoor Ambient 35°C DB; Heating; Indoor 20°C DB, Outdoor 7°C DB/6°C WB

(Note 1) MMD-AP###H type unit fan speed H-M-L is selected and hard wired at the indoor PC board only.  
(Note 2) The sound level are measured in an anechoic chamber in accordance with JIS B8616.

Distributed by:

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Notice: Toshiba is committed to continuously improving its products, to ensure the highest quality and reliability standards, and to meet local regulations and market requirements. All features and specifications subject to change without prior notice. Date: July 2009 Equipment rated in accordance with MEPS AS 3823.3 - 2007 E&OE

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