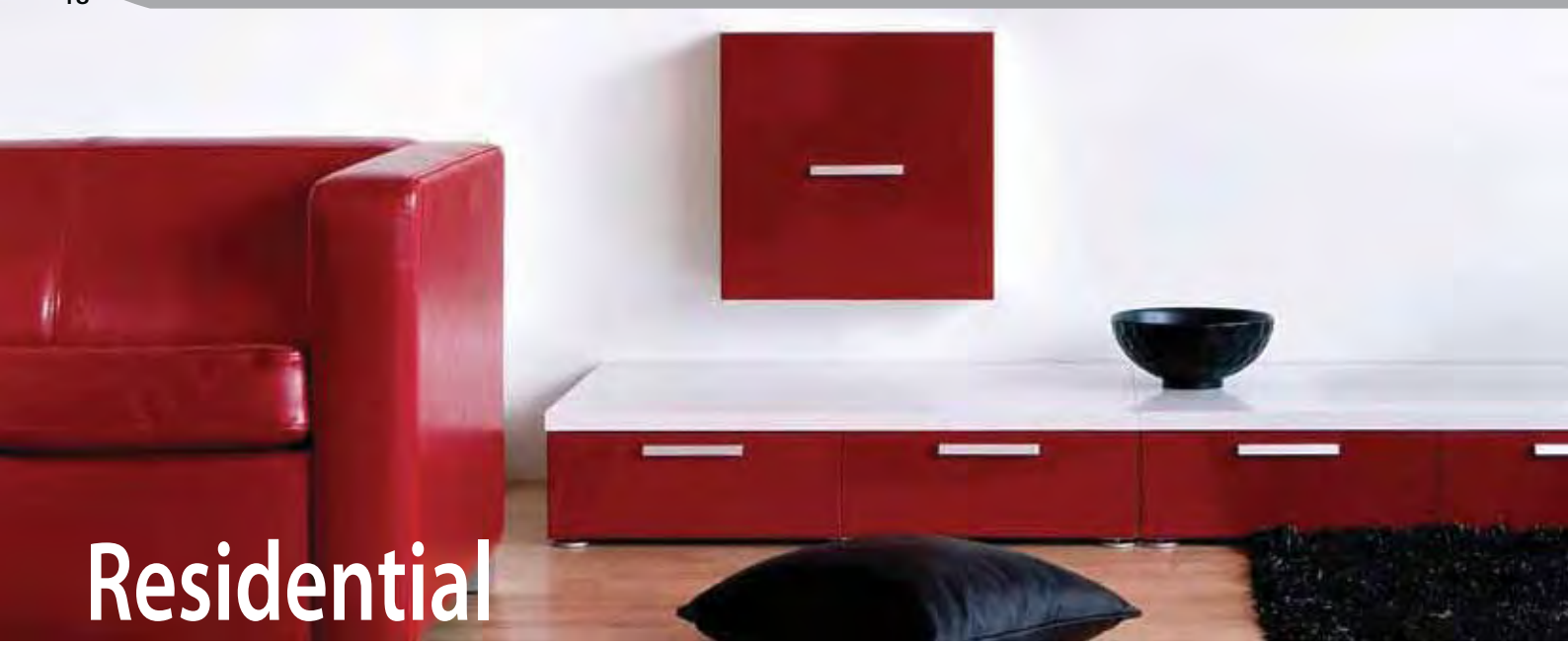
Residential

The residential range

Ultimate inverter technology, ultimate comfort.



Residential

When technology meets comfort

Toshiba was the first company to incorporate inverter technology into air conditioning systems in 1981 and since then it has always maintained a technological advantage over its competitors.
The development of the new and exclusive DC hybrid inverter system has reaffirmed this ability to innovate and maintain technological leadership in a fast-growing market. But for Toshiba, innovation also means a strong commitment to international institutions that carefully evaluate the impact of new technologies on our environment.
Toshiba combines technological development with care for future generations: the result is a range of extremely energy-efficient air conditioners, reducing greenhouse gas emissions at source.
Toshiba continuous research developed PWM technology, which is used together with the traditional PAM control. The application of these two distinct technologies allows total control of performance and energy use.

The ultimate expression of inverter technology

Toshiba DC hybrid inverter technology controls the capacity supplied by the air conditioner. By modifying the supply current frequency or intensity, it ensures smooth linear variation of the rotation speed and capacity of the compressor – the heart of the air conditioner.
This allows the cooling and heating capacities to be matched to the actual operating conditions required.
When the room temperature is different from the set point, the air conditioner operates at maximum capacity, ensuring that a comfortable temperature will be reached quickly. Once the desired temperature is reached, the inverter precisely adjusts the capacity to maintain a temperature close to the set point.

Superior COP

Advanced filtration systems

Optimised compatibility with the environment

Unequalled capacity reserves

Filtration, purification, innovation

True quality in the residential environment goes beyond control of the air filtration. With Toshiba residential air conditioners, air quality is guaranteed by many stages of filtration and additional functions such as pre-treatment, removal of fine particles, viruses, bacteria and allergens or total purification.
Electrostatic purification also guarantees a basic cost advantage as there are no ongoing replacement part costs.

TOSHIBA NEW IAQ Filter

Care for the environment

Toshiba has anticipated legislation on the control of refrigerant emissions to the atmosphere, and pioneers solutions that our technological leadership enables us to offer.

- UP TO 5,68 COP
- R-410A
- DUAL STAGE COMPRESSOR
- SINGLE-SPLIT
- FIVE SIZES RANGE

- New air purifier
- Plasma ion charger
- Self cleaning
- Stylish new design
- Wide air flow area

Super Daiseikai PKVP/PAVP Inverter high-wall

Features

The new SuperDaiseikai has been designed and created with the objective to provide excellence, respecting the latest eco-evolution trends and maintaining the ultimate comfort.

World's best class energy efficiency.

Pure air.

Premium design.

Key features

Improved class A efficiency with COP value above 5 (5,36 for size 10).

New technology and advanced electronic reduced the Annual Energy Consumption of 30%*.

Dual stage compressor improve the load efficiency in a wide range of conditions.

Fast filtration: impurities are ionized by the ion charger and absorbed by the new heat exchanger.

Self cleaning to prevent the growth of mold inside the unit.

Nordic version with heat on the base plate of outdoor unit and winter operation mode.

** in cooling; compared to SKV*

Performance data

Outdoor unit			RAS-07PAVP-E	RAS-10PAVP-E	RAS-13PAVP-E	RAS-16PAVP-E	RAS-18PAVP-E
Indoor unit			RAS-07PKVP-E	RAS-10PKVP-E	RAS-13PKVP-E	RAS-16PKVP-E	RAS-18PKVP-E
Cooling capacity	kW		2,0	2,5	3,5	4,5	5,0
Cooling range (min. – max.)	kW		0,3 - 3,0	0,3 - 3,5	0,3 - 4,5	0,3 - 5,0	0,3 - 5,5
Power input (min. – rated – max.)	kW	CO	0,07 - 0,35 - 0,68	0,07 - 0,47 - 0,88	0,07 - 0,77 - 1,25	0,07 - 1,22 - 1,49	0,07 - 1,49 - 1,75
EER	W/W		5,63	5,26	4,55	3,69	3,36
Energy efficiency class		CO	A	A	A	A	A
Annual energy consumption	kWh		177	237	385	610	745
Heating capacity	kW		2,5	3,0	4,0	5,5	6,0
Heating range (min. – max.)	kW		0,3 - 5,0	0,3 - 5,8	0,3 - 6,1	0,3 - 6,5	0,3 - 6,7
Power input (min. – rated – max.)	kW	HP	0,07 - 0,44 - 1,30	0,07 - 0,56 - 1,60	0,07 - 0,84 - 1,60	0,07 - 1,34 - 1,70	0,07 - 1,54 - 1,75
COP	W/W		5,68	5,36	4,76	4,1	3,9
Energy efficiency class		HP	A	A	A	A	A

Physical data **Indoor unit**

Indoor unit			RAS-07PKVP-E	RAS-10PKVP-E	RAS-13PKVP-E	RAS-16PKVP-E	RAS-18PKVP-E
Air flow (h)	m^3/h – l/s	CO	612/288 - 170/80	624/306 - 173/85	696/318 - 193/88	744/372 - 207/103	804/408 - 223/113
Sound pressure level (h/l)	dB(A)	CO	42/26	43/27	45/27	47/30	49/31
Sound power level (h/l)	dB(A)	CO	57/41	58/42	60/42	62/45	64/46
Air flow (h/l)	m^3/h – l/s	HP	648/348 - 180/97	666/348 - 185/97	696/348 - 193/97	744/384 - 207/107	804/420 - 223/117
Sound pressure level (h/l)	dB(A)	HP	42/26	43/27	45/27	47/30	49/31
Sound power level (h/l)	dB(A)	HP	57/41	58/42	60/42	62/45	64/46
Dimensions (h × w × d)	mm		295 x 790 x 242	295 x 790 x 242	295 x 790 x 242	295 x 790 x 242	295 x 790 x 242
Weight	kg		12	12	12	12	12

Physical data **Outdoor unit**

Outdoor unit			RAS-07PAVP-E	RAS-10PAVP-E	RAS-13PAVP-E	RAS-16PAVP-E	RAS-18PAVP-E
Air Flow	m^3/h – l/s	CO	1662 - 462	1800 - 500	2232 - 620	2232 - 620	2370 - 658
Sound pressure level	dB(A)	CO	46	48	50	50	52
Sound power level	dB(A)	CO	61	63	65	65	67
Operating range	°C	CO	-10÷46	-10÷46	-10÷46	-10÷46	-10÷46
Air Flow	m^3/h – l/s	HP	1530 - 425	1662 - 462	2088 - 580	2088 - 580	2232 - 620
Sound pressure level	dB(A)	HP	46	48	50	50	52
Sound power level	dB(A)	HP	61	63	65	65	67
Operating range	°C	HP	-15÷24	-15÷24	-15÷24	-15÷24	-15÷24
Dimensions (h x w x d)	mm		550 x 780 x 290	550 x 780 x 290	550 x 780 x 290	550 x 780 x 290	550 x 780 x 290
Weight	kg		39	39	40	40	40
Compressor type			Twin Rotary	Twin Rotary	Twin Rotary	Twin Rotary	Twin Rotary
Flare connections (gas-liquid)			3/8" - 1/4"	3/8" - 2/8"	3/8" - 2/8"	4/8" - 2/8"	1/2" - 1/4"
Minimum pipe length	m		2	2	2	2	2
Maximum pipe length	m		20	20	20	20	20
Maximum height difference	m		10	10	10	10	10
Chargeless pipe lenght	m		15	15	15	15	15
Power supply	V-ph-Hz		220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50

CO = cooling mode
HP = heating mode

R-410A

DC HYBRID INVERTER

SINGLE SPLIT

NORDIC VERSION

Plasma air Purifier

Dust collection

Bacteria elimination

Deodorising

Modern design

Super Daiseikai SKVP2 Inverter high-wall

Features

Latest release in the Innovative Daiseikai family, with higher standard in efficiency and comfort.

New ergonomic and practical remote control with easy access to main buttons and a sliding panel to hide the control used less frequently

Key features

Energy consumption with 5,1 EER in cooling (size 10).

Plasma air purifier: doesn't need cleaning since its deodorising effect gets constantly regenerated.

New, modern aesthetic.

Self-cleaning with low density Ozone will eliminate all bacteria normally remaining after operation.

DC Hybrid Inverter technology with Twin Rotary compressor.

Nordic version with heat on the base plate of outdoor unit and winter operation mode.

Performance data

Outdoor unit			RAS-10SAVP2-E	RAS-13SAVP2-E	RAS-16SAVP2-E
Indoor unit*			RAS-10SKVP2-E	RAS-13SKVP2-E	RAS-16SKVP2-E
Cooling capacity	kW		2,51	3,52	4,53
Cooling range (min. – max.)	kW		0,5 - 3,5	0,6 - 4,5	0,8 - 5,0
Power input (min. – rated – max.)	kW	CO	0,10 - 0,49 - 0,87	0,11 - 0,84 - 1,37	0,15 - 1,34 - 1,82
EER	W/W		5,12	4,19	3,38
Energy efficiency class		CO	A	A	A
Annual energy consumption	kWh		245	420	670
Heating capacity	kW		3,21	4,22	5,53
Heating range (min. – max.)	kW		0,5 - 6,5	0,5 - 7,7	0,7 - 8,0
Power input (min. – rated – max.)	kW	HP	0,09 - 0,63 - 1,82	0,10 - 0,95 - 2,33	0,15 - 1,47 - 2,51
COP	W/W		5,1	4,44	3,76
Energy efficiency class		HP	A	A	A

Physical data **Indoor unit**

Indoor unit			RAS-10SKVP2-E	RAS-13SKVP2-E	RAS-16SKVP2-E
Air flow (h)	m^3/h – l/s	CO	630 - 175	642 -178	738 - 205
Sound pressure level (h/l)	dB(A)	CO	42/27	43/27	45/29
Sound power level (h/l)	dB(A)	CO	55	56	58
Air flow (h)	m^3/h – l/s	HP	684 - 190	744 - 207	738 - 205
Sound pressure level (h/l)	dB(A)	HP	43/27	44/27	45/29
Sound power level (h/l)	dB(A)	HP	56	57	58
Dimensions (h × w × d)	mm		275x790x205	275x790x205	275x790x205
Weight	kg		9	9	9

Physical data **Outdoor unit**

Outdoor unit			RAS-10SAVP2-E	RAS-13SAVP2-E	RAS-16SAVP2-E
Air Flow	m^3/h – l/s	CO	1440 - 400	1680 - 467	1920 - 533
Sound pressure level	dB(A)	CO	46	48	49
Sound power level	dB(A)	CO	59	61	62
Operating range	°C	CO	-10÷46	-10÷46	-10÷46
Air Flow	m^3/h – l/s	HP	1200 - 333	1440 - 400	1680 - 467
Sound pressure level (h)	dB(A)	HP	47	50	50
Sound power level (h)	dB(A)	HP	60	63	63
Operating range	°C	HP	-15÷24	-15÷24	-15÷24
Dimensions (h x w xd)	mm		630 x 800 x 300	630 x 800 x 300	630 x 800 x 300
Weight	kg		41	41	41
Compressor type			DC Twin Rotary	DC Twin Rotary	DC Twin Rotary
Flare connections (gas-liquid)			3/8" - 1/4"	3/8" - 1/4"	1/2" - 1/4"
Minimum pipe length	m		2	2	2
Maximum pipe length	m		25	25	25
Maximum height difference	m		10	10	10
Chargeless pipe lenght	m		15	15	15
Power supply	V-ph-Hz		220/240-1-50	220/240-1-50	220/240-1-50

CO = cooling mode
HP = heating mode

COP 4,27

R-410A

SINGLE/MULTI-SPLIT

DEODORIZING EFFECT

A/A class in cooling and heating

Modern design

PAM + PWM

Comfort sleep function

Suzumi+ SKV2 Inverter high-wall

Features

This elegant unit combines an improved energy efficiency with indoor air quality.

Suzumi+ is very silent and feature a unique "Quiet" button on the remote control, to further increase the acoustic comfort.

Key features

One touch my comfort button. Memorize the desired operation parameters.

Toshiba new IAQ filter filtration system includes extremely powerful anti virus, anti bacteria and the deodorizing effects.

Self cleaning function to remove moist from the internal components of the unit.

Toshiba DC hybrid inverter technology controls and adjust the capacity supplied by the air conditioner.

A/A efficiency class in cooling and heating (sizes below 6 kW).

Modern and compact design.

Performance data

Outdoor unit			RAS-10SAV2-E	RAS-13SAV2-E	RAS-16SAV2-E	RAS-18SAV2-E	RAS-22SAV2-E
Indoor unit			RAS-10SKV2-E	RAS-13SKV2-E	RAS-16SKV2-E	RAS-18SKV2-E	RAS-22SKV2-E
Cooling capacity	kW		2,5	3,5	4,5	5	6
Cooling range (min. – max.)	kW		1,1 - 3,0	0,8 - 4,1	0,8 - 5,0	1,1 - 6,0	1,2 - 6,7
Power input (min. – rated – max.)	kW	CO	0,25 - 0,598 - 0,82	0,15 - 1,00 - 1,25	0,15 - 1,395 - 1,72	0,18 -1,42 - 2,00	0,20 - 1,995 - 2,65
EER	W/W		4.18	3.50	3,23	3,52	3,01
Energy efficiency class		CO	A	A	A	A	B
Annual energy consumption	KWh		299	500	698	710	998
Heating capacity	kW		3,2	4,2	5,5	5,8	7
Heating range (min. – max.)	kW		0,9 - 4,8	0,9 - 5,6	0,9 - 6,9	0,8 - 6,3	1,0 - 7,5
Power input (min. – rated – max.)	kW	HP	0,17 - 0,75 - 1,40	0,15 - 1,08 - 1,58	0,15 -1,52 -1,98	0,14 - 1,56 -1,70	0,18 - 2,05 - 2,21
COP	W/W		4.27	3.89	3,62	3,72	3,41
Energy efficiency class		HP	A	A	A	A	B

Physical data **Indoor unit**

Indoor unit			RAS-10SKV2-E	RAS-13SKV2-E	RAS-16SKV2-E	RAS-18SKV2-E	RAS-22SKV2-E
Air flow	m^3/h – l/s	CO	516 - 143	570 - 158	684 - 190	954 - 265	1080 - 300
Sound pressure level (h/l)	dB(A)	CO	38/26	39/26	45/30	44/32	47/35
Sound power level (h)	dB(A)	CO	51	52	58	59	62
Air flow	m^3/h – l/s	HP	570 - 158	624 - 173	738 - 205	990-275	1098/305
Sound pressure level (h/l)	dB(A)	HP	39/28	40/28	45/31	44/32	47/35
Sound power level (h)	dB(A)	HP	52	53	58	59	62
Dimensions (h × w × d)	mm		275 x 790 x 205	275 x 790 x 205	275 x 790 x 205	320 x 1050 x 228	320 x 1050 x 228
Weight	kg		9	9	9	13	13

Physical data **Outdoor unit**

Outdoor unit			RAS-10SAV2-E	RAS-13SAV2-E	RAS-16SAV2-E	RAS-18SAV2-E	RAS-22SAV2-E
Air Flow	m^3/h – l/s	CO	1800 - 500	2250 - 625	2160 - 600	1914 - 532	2316-643
Sound pressure level	dB(A)	CO	46	48	49	49	53
Sound power level	dB(A)	CO	59	61	62	64	68
Operating range	°C	CO	-10÷46	-10÷46	-10÷46	-10÷46	-10÷46
Air flow		HP	1800-500	2250-625	1920-533	1914-532	2232-620
Sound pressure level	dB(A)	HP	47	50	50	50	52
Sound power level	dB(A)	HP	60	63	63	65	67
Operating range	°C	HP	-15÷24	-15÷24	-15÷24	-15÷24	-15÷24
Dimensions (h x w x d)	mm		550 x 780 x 290	550 x 780 x 290	550 x 780 x290	550 x 780 x290	550 x 780 x290
Weight	kg		33	33	39	41	41
Compressor type			DC Rotary	DC Rotary	DC Twin Rotary	DC Twin Rotary	DC Twin Rotary
Flare connections (gas-liquid)			3/8" - 1/4"	3/8" - 1/4"	1/2" - 1/4"	1/2" - 1/4"	1/2" - 1/4"
Minimum pipe length	m		2	2	2	2	2
Maximum pipe length	m		20	20	20	20	20
Maximum height difference	m		10	10	10	10	10
Chargeless pipe length	m		15	15	15	15	15
Power supply	V-ph-Hz		220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50

CO = cooling mode
HP = heating mode

R-410A

DC HYBRID INVERTER

AIR PURIFICATION

A class in cooling and heating

3 in 1 filtration system

Extremely low sound level

Modern and compact design

AvAnt 7SKV
Inverter high-wall

Features

AvAnt-garde Inverter model specifically conceived for residential users.

If your need is ideal temperature all year round, delivered with high energy saving and extremely low noise, Toshiba AvAnt Inverter is the solution.

Key features

A energy class in cooling and heating (capacities 10 and 13): high energy saving.

The lowest indoor unit noise of the category: only 20 dB(A) at low fan speed.*

3 in 1 filtration system: to reduce bacteria, prevent allergies and eliminate odours.

New modern design with reduced dimension to fit into every room.

Easy to use remote control.

** model 137SKV, from 2,5 m distance*

Performance data

Outdoor unit			RAS-107SAV-E3	RAS-137SAV-E3	RAS-167SAV-E3
Indoor unit			RAS-107SKV-E3	RAS-137SKV-E3	RAS-167SKV-E3
Cooling capacity	kW		2,5	3,5	4,4
Cooling range (min. – max.)	kW		1,1-3,0	1,1-4,0	1,1-5,0
Power input (min. – rated – max.)	kW	CO	0,26-0,76-0,97	0,25-1,08-1,33	0,26-1,56-1,90
EER	W/W		3,29	3,24	2,82
Energy efficiency class		CO	A	A	C
Annual energy consumption	KWh		380	540	780
Heating capacity	kW		3,2	4,2	5,2
Heating range (min. – max.)	kW		0,9-4,1	0,9-5,0	1,0-6,2
Power input (min. – rated – max.)	kW	HP	0,20-0,87-1,20	0,17-1,14-1,48	0,19-1,52-1,81
COP	W/W		3,68	3,68	3,42
Energy efficiency class		HP	A	A	B

Physical data **Indoor unit**

Indoor unit			RAS-107SKV-E3	RAS-137SKV-E3	RAS-167SKV-E3
Air Flow (max)	m^3/h – l/s	CO	522 -145	570 - 158	690 - 192
Sound pressure level (l/m/h)	dB(A)	CO	29/33/38	26/33/39	30/40/45
Sound power level (l/m/h)	dB(A)	CO	51	52	58
Air Flow (max)	m^3/h – l/s	HP	576 - 160	624 - 173	744 - 207
Sound pressure level (l/m/h)	dB(A)	HP	30/35/40	28/34/40	31/40/45
Sound power level (l/m/h)	dB(A)	HP	53	53	58
Dimensions (h x w x d)	mm		250 x 740 x 195	275 x 790 x 205	275 x 790 x 205
Weight	kg		8	9	9

Physical data **Outdoor unit**

Outdoor unit			RAS-107SAV-E3	RAS-137SAV-E3	RAS-167SAV-E3
Air Flow	m^3/h – l/s	CO	1620 – 450	2250 – 625	2250 – 625
Sound pressure level	dB(A)	CO	48	48	49
Sound power level	dB(A)	CO	61	61	62
Operating range	°C	CO	15 ÷ 43	–10 ÷ 46	–10 ÷ 46
Air flow		HP	1620-450	2250-625	2250-625
Sound pressure level	dB(A)	HP	50	50	50
Sound power level	dB(A)	HP	63	63	63
Operating range	°C	HP	–10 ÷ 24	–15 ÷ 24	–15 ÷ 24
Dimensions (h x w x d)	mm		530 × 660 × 240	550 × 780 × 290	550 × 780 × 290
Weight	kg		27	33	40
Compressor type			DC Rotary	DC Rotary	DC Twin Rotary
Flare connections (gas-liquid)			3/8" – 1/4"	3/8" – 1/4"	1/2" – 1/4"
Minimum pipe length	m		2	2	2
Maximum pipe length	m		10	20	20
Maximum height difference	m		8	10	10
Chargeless pipe length	m		10	15	15
Power supply	V-ph-Hz		220/240-1-50	220/24-1-50	220/240-1-50
Filter			Active Carbon Catechin x 2		

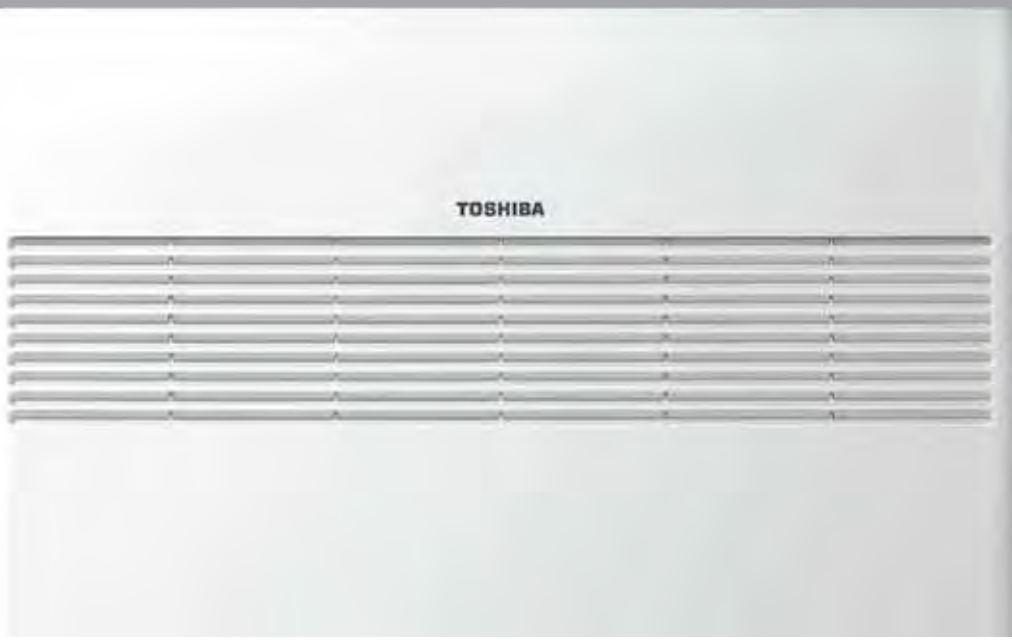
CO = cooling mode
HP = heating mode

A/A CLASS

R-410A

SINGLE AND MULTI SPLIT

DEODORIZING EFFECT



Smart user interface

Floor heating mode

Bi-flow

Compact design

UFV
Inverter console

Features

Innovative and compact unit to be installed on the floor and in low wall applications, fit perfectly under the window sills or in a low ceiling attic.

Unique floor heating function, to deliver a powerful flow at floor level for a uniform and comfortable room heating.

Key features

Energy efficent Toshiba DC Hybrid inverter.

Compact and modern design in all three dimensions (60 × 70 × 22 cm).

Bi-flow. Two outlets for complete personalized flow: flow intensity and air direction control.

Toshiba new IAQ filter filtration system, includes extremely powerful anti virus, anti bacteria and the deodorizing effects.

Child lock function on the unit display panel.

Brightness level control of the display unit to reduce the led light glow.

Automatic restart function in case of unexpected electricity supply line power cuts.

Performance data

Outdoor unit			RAS-10SAV2-E	RAS-13SAV2-E	RAS-18SAV2-E
Indoor unit			RAS-B10UFV-E	RAS-B13UFV-E	RAS-B18UFV-E
Cooling capacity	kW		2,5	3,5	5,0
Cooling range (min. - max.)	kW		1,1 - 3,1	1,1 - 4,1	1,0 - 5,7
Power input (min. -rated - max.)	kW	CO	0,59	0,23 - 0,97 - 1,35	0,20 - 1,66 - 1,95
EER	W/W		4,20	3,61	3,01
Energy efficiency class		CO	A	A	B
Annual energy consumption	KWh		298	485	830
Heating capacity	kW		3,2	4,2	5,8
Heating range (min. - max.)	kW		1,0 - 4,8	1,0 - 5,4	1,1 - 6,3
Power input (min. -rated - max.)	kW	HP	0,18 - 0,75 - 1,40	1,12	1,80
COP	W/W		4,27	3,73	3,21
Energy efficiency class		HP	A	A	C

Physical data **Indoor unit**

Indoor unit			RAS-B10UFV-E	RAS-B13UFV-E	RAS-B18UFV-E
Air Flow	m^3/h – l/s	CO	468 - 130	510 - 142	600 - 167
Sound pressure level (h/l)	dB(A)	CO	39/26	40/27	46/34
Sound power level (h/l)	dB(A)	CO	54	55	61
Air Flow	m^3/h – l/s	HP	510 - 142	552 - 153	642 - 178
Sound pressure level (h/l)	dB(A)	HP	39/26	40/27	46/34
Sound power level (h/l)	dB(A)	HP	54	55	61
Dimensions (h x w x d)	mm		600x700x220	600x700x220	600x700x220
Weight	kg		16	16	16

Physical data **Outdoor unit**

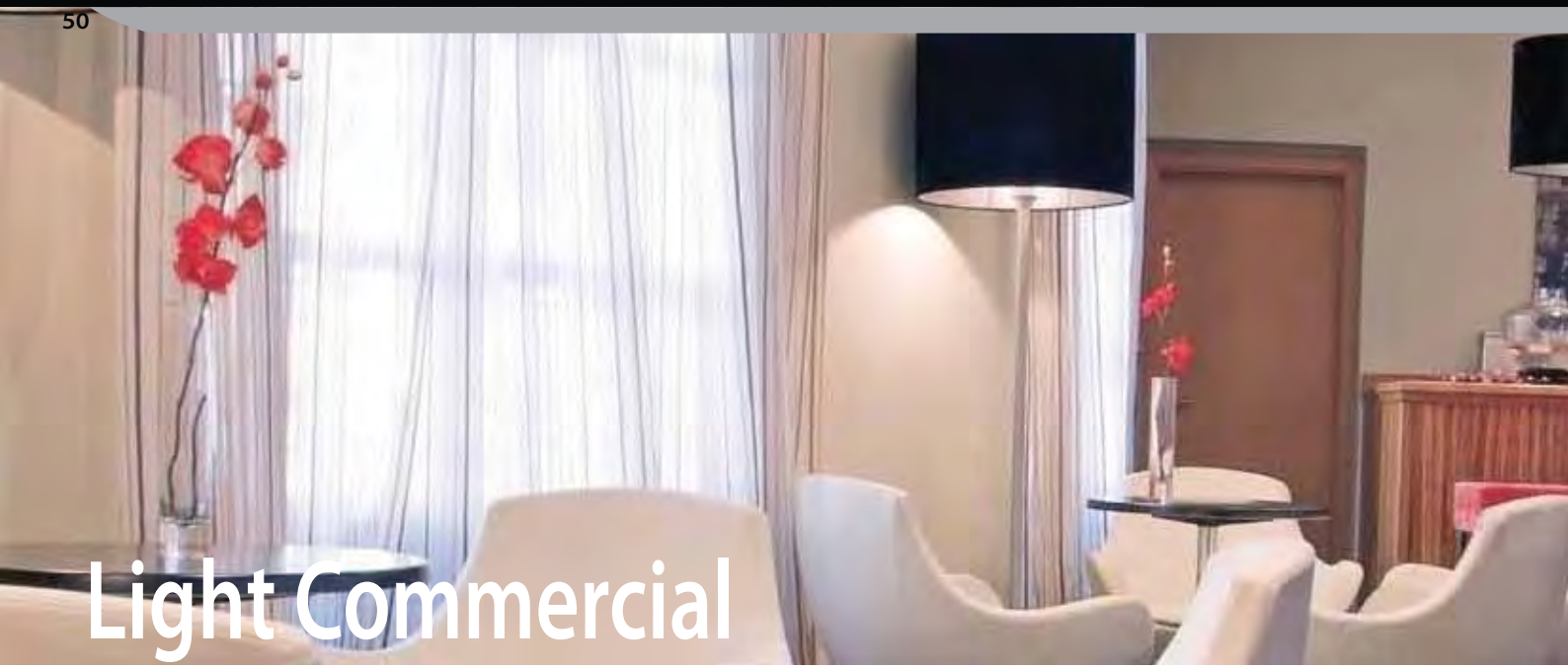
Outdoor unit			RAS-10SAV2-E	RAS-13SAV2-E	RAS-18SAV2-E
Air Flow	m^3/h – l/s	CO	1800 - 500	2250 - 625	2178 - 605
Sound pressure level	dB(A)	CO	46	48	49
Sound power level	dB(A)	CO	59	61	64
Operating range	°C	CO	-10÷46	-10÷46	-10÷46
Air Flow		HP	1800 - 500	2250 - 625	1914 - 532
Sound pressure level	dB(A)	HP	47	50	50
Sound power level	dB(A)	HP	60	63	65
Operating range	°C	HP	-15÷24	-15÷24	-15÷24
Dimensions (h x w x d)	mm		550 x 780 x 290	550 x 780 x 290	550 x 780 x 290
Weight	kg		33	33	41
Compressor type			DC Rotary	DC Rotary	DC Twin Rotary
Flare connections (gas-liquid)			3/8" - 1/4"	3/8" - 1/4"	1/2" - 1/4"
Minimum pipe length	m		2	2	2
Maximum pipe length	m		20	20	20
Maximum height difference	m		10	10	10
Chargeless pipe length	m		15	15	15
Power supply	V-ph-Hz		220/240-1-50	220/240-1-50	220/240-1-50

CO = cooling mode
HP = heating mode

Light Commercial

The light commercial range

The most advanced systems for the professionals.



Light Commercial

Solutions for professionals, from professionals

Toshiba Digital and Super Digital Inverter systems deliver exceptional operating savings in extremely compact units.
With state-of-the-art technologies, flexible controls and improved installation they bring comfort and convenience to any business installation.
A complete range of indoor units satisfies all commercial applications: ceiling, cassette, ducted, suspended, high-wall and flexi units.
The enlargement of the range with maximum cooling capacities up to 27 kW allows to address even more commercial applications with larger volumes.

When the inverter becomes digital

The technology of the Digital Inverter control module ensures optimised reproduction of the supply sine wave at the desired frequency, in order to reduce inefficient harmonics that inverters normally emit.
With this innovative control method, the Toshiba Digital Inverter brings state-of-the-art inverter technology to the commercial sector, offering considerable advantages in terms of capacity, energy savings and optimised comfort.
The compressor operation is practically imperceptible.

Who says that you must choose between improved performance and minimised consumption?

The Toshiba Digital and Super Digital Inverters systems are powerful and extremely efficient.
They provide air conditioning with great energy savings.
The new series 4 of Super Digital Inverter provides the best efficiency performance in the industry: up to 4,52 EER in cooling mode and up to 4,79 COP in heating mode.
In most applications, these systems can reduce energy consumption by up to 50% compared with traditional fixed speed units.
The variable capacity management of the compressor allows the Digital and Super Digital Inverter to maintain room temperature control and to ensure minimum energy wastage.
The new series Super Digital Inverter 4 and Digital Inverter 3 can fit R22 or R407C old pipes in case of replacement of high-consuming fixed speed systems.

Absolute ease-of-installation

Superior compactness and capacity

Maximised operating economy

Total unit control

All the flexibility you have ever dreamt of

If you want high performance, compact units and optimum comfort, Toshiba has the ideal product for your requirements.

With the continuous improvement of the inverter control system, Toshiba offers vector control for its DC hybrid inverter, which enhances system efficiency and reduces noise levels in the power lines.

The new developments in electronics have been complemented by compressor innovation.

High-tech elements include improved coils, high precision components and higher refrigerant compression thanks to redesigned compression channels.

The new technology applied to Super Digital Inverter series 4 is able to satisfy applications that require cooling at low operating conditions down to –15 °C.

Powerful heating capacities are possible at –20 °C outdoor temperature.

The enhanced Eco-driving DC twin-rotary compressor delivers stable performance with extremely low rotor friction, making it ideal for noise-sensitive applications as well as for efficient operations in partial load conditions.

R-410A HEAT PUMPS

ECO-DRIVING COMPRESSORS

A-CLASS SYSTEM

The best EER and COP

Wide operating range; down to –15 °C in cooling and –20 °C in heating

Super Digital Inverter 4 Outdoor unit

Features

The new Super Digital Inverter, series 4, sets a new limit for the industry energy performance.
The seasonal and the rated efficiencies are the highest in the industry for capacities from 10 to 12,5 kW.
The air management system has been improved: high efficiency fan motors, larger fans and new fan grille design also contribute to the exceptional energy performance.
Piping and operating limits improved.
The new system can work at extremely low temperatures, in cooling and heating.
Admitted pipe length is up to 75 m.
SDI4 are designed for R410A refrigerant, but can also fit R22 or R407C piping refrigerants in case of refurbishment.

Key features

The best EER/COP values in the industry.

Most systems are A-class rated in cooling and heating operation. The new systems provide excellent seasonal energy performance, thus saving up to 70% annual energy cost compared to fixed speed systems.

The structure and magnetic action of the new Eco-driving twin-rotary compressors provide excellent energy performance at full load as well as in partial load conditions (operation down to 10 rps).

Longer pipe runs, up to 75 m length and 30 m elevation for increased installation flexibility (4HP ÷ 6HP).

Wide operating range: down to –15 °C in cooling mode and down to –20 °C in heating mode (2HP ÷ 6HP).

The Toshiba "anti-ice" circuit prevents the condenser to be caught in ice in winter.

The extended capacity range with 3 phases units form 10 to 14 kW, broaden the spectrum of light commercial installation possibilities.

Single phase

Physical data **outdoor unit**

Outdoor unit			RAV-SP404AT-E	RAV-SP454AT-E	RAV-SP564AT-E	RAV-SP804AT-E	RAV-SP1104AT-E	RAV-SP1404AT-E
			1,5 HP	1,7 HP	2 HP	3 HP	4 HP	5 HP
Air Flow	m^3/h – l/s		2400 - 667	2400 - 667	2400 - 667	3000 - 833	6060 - 1683	6180 - 1716
Sound pressure level	dB(A)	CO	45	45	47	48	49	51
Sound power level	dB(A)	CO	62	62	63	64	66	68
Operating range	°C	CO	-15 / 43	-15 / 43	-15 / 43	-15 / 43	-15 / 43	-15 / 43
Sound pressure level	dB(A)	HP	47	47	48	49	50	52
Sound power level	dB(A)	HP	64	64	64	65	67	69
Operating range	°C	HP	-15 / 15	-15 / 15	-20 / 15	-20 / 15	-20 / 15	-20 / 15
Dimensions (HxWxD)	mm		550 x 780 x 290	550 x 780 x 290	550 x 780 x 290	890 x 900 x 320	1340 × 900 × 320	1340 × 900 × 320
Weight	kg		40	40	44	63	93	93
Compressor type			DC Twin Rotary	DC Twin Rotary	DC Twin Rotary	DC Twin Rotary	DC Twin Rotary	DC Twin Rotary
Flare connections								
Gas	in		1/2	1/2	1/2	5/8	5/8	5/8
Liquid	in		1/4	1/4	1/4	3/8	3/8	3/8
Minimum pipe length	m		5	5	5	5	3	3
Maximum pipe length	m		30	30	50	50	75	75
Maximum height difference	m		30	30	30	30	30	30
Chargeless pipe length	m		20	20	20	30	30	30
Power supply	V-ph-Hz		220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50

Three phase

Physical data **outdoor unit**

Outdoor unit			RAV-SP1104AT8-E	RAV-SP1404AT8-E	RAV-SP1604AT8-E
			4 HP	5 HP	6 HP
Air Flow	m^3/h – l/s		6060 - 1683	6180 - 1717	6180 - 1717
Sound pressure level	dB(A)	CO	49	51	51
Sound power level	dB(A)	CO	66	68	68
Operating range	°C	CO	-15 / +46	-15 / +46	-15 / +46
Sound pressure level	dB(A)	HP	50	52	53
Sound power level	dB(A)	HP	67	69	70
Operating range	°C	HP	-20 / +15	-20 / +15	-20 / +15
Dimensions (HxWxD)	mm		1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320
Weight	kg		95	95	95
Compressor type			DC Twin Rotary	DC Twin Rotary	DC Twin Rotary
Flare connections					
Gas	in		5/8	5/8	5/8
Liquid	in		3/8	3/8	3/8
Minimum pipe length	m		3	3	3
Maximum pipe length	m		75	75	75
Maximum height difference	m		30	30	30
Chargeless pipe length	m		30	30	30
Power supply	V-ph-Hz		380/415-3N-50	380/415-3N-50	380/415-3N-50

CO = cooling mode
HP = heating mode

R-410A HEAT PUMPS

VECTOR IPDU INVERTER

HIGH PERFORMANCE

Digital Inverter 3 Outdoor unit

Performing EER

Light and compact: easy to install

Compatible with a wide range of indoor units

Features

Toshiba Digital Inverter 3 is an advanced solution that can meet the growing market need for ease of installation and increased consumer comfort.
This new system, which uses the environmentally friendly refrigerant R410A, can use piping designed for old R22 or R407C refrigerants.
This new solution enables old high-energy consumption air conditioning systems to be replaced by the most advanced inverter units, with significant benefits in terms of performance, acoustic comfort and energy-efficiency.

Key features

Extremely light and compact condensing units: easy to install in small spaces.

Excellent EER with significant savings in annual power consumption.

Compatible with a wide choice of indoor units: ceiling, 4-way cassette, compact 4-way cassette, ducted, high-wall and flexi units.

The Vector Intelligent Drive Unit (IPDU) technology ensures high performance.

Simplified maintenance using the new TCC-Link wired remote control panel.

Single phase

Physical data **outdoor unit**

Outdoor unit			RAV-SM563AT-E 2 HP	RAV-SM803AT-E 3 HP	RAV-SM1103AT-E 4 HP	RAV-SM1403AT-E 5 HP	RAV-SM1603AT-E 6 HP
Air Flow	m^3/h – l/s		2400 - 667	2700 - 750	4500 - 1250	4500 - 1250	6180 - 1717
Sound pressure level	dB(A)	CO	46	48	53	54	51
Sound power level	dB(A)	CO	63	65	70	71	68
Operating range	°C	CO	-15 / +43	-15 / +43	-15 / +43	-15 / +43	-15 / +43
Sound pressure level	dB(A)	HP	48	50	54	54	53
Sound power level	dB(A)	HP	65	67	71	71	70
Operating range	°C	HP	-15 / +15	-15 / +15	-15 / +15	-15 / +15	-15 / +15
Dimensions (HxWxD)	mm		550 x 780 x 290	550 x 780 x 290	795 x 900 x 320	795 x 900 x 320	1340 x 900 x 320
Weight	kg		38	44	77	77	99
Compressor type			DC Twin Rotary	DC Twin Rotary	DC Twin Rotary	DC Twin Rotary	DC Twin Rotary
Flare connections							
Gas	in		1/2	5/8	5/8	5/8	5/8
Liquid	in		1/4	3/8	3/8	3/8	3/8
Minimum pipe length	m		5	5	5	5	5
Maximum pipe length	m		30	30	50	50	50
Maximum height difference	m		30	30	30	30	30
Chargeless pipe length	m		20	20	30	30	30
Power supply	V-ph-Hz		220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50

CO = cooling mode
HP = heating mode

R-410A HEAT PUMPS

INVERTER DRIVEN

HIGH CAPACITY

- Compact outdoor unit
- Extended operation range
- High EER and COP

Big Digital Inverter Outdoor Unit

Features

The new Big DI inverter proposes an alternative cost competitive solution for medium size applications like shop and small office buildings.
The big DI system is the ideal solution in case of a large volume with single temperature control as it allows simultaneous operation of 2, 3 or up to 4 identical indoor units.

Toshiba concentrates a set of new high technologies in one unit, to deliver a top COP and EER* together with big capacity, still offering a very compact and flexible installation; through extensive piping run and a wide range of indoor units connection (please refer to page 32). Thanks to an extended operation range, the big DI allows comfortable environment throughout the whole year.

Key features

Cost competitive solution for high capacity applications of up to 27 kW** cooling, concentrated in only 0.29 m^2 footprint.

High-tech concentration (new twin rotary DC compressor, DC fan motor combined to a new propeller fan, vector controlled inverter and a 3-row heat exchanger) allowing to achieve Top energy class up to a EER of 3.21 and a COP of 3.85*

Wide operation range down to -20 °C in heating mode, down to -15 °C and up to 46 °C in cooling mode.

Long piping run up to 70 m total length and 30 m elevation.

Reuse of existing R22 and R407C piping capability.

**20 kW in 4 way-cassette twin combination*
***Maximum cooling capacity for RAV-SM2804AT8-E*

Three phase

Physical data **outdoor unit**

Outdoor unit			RAV-SM2244AT8-E 8 HP	RAV-SM2804AT8-E 10 HP
Air Flow	m3/h - l/s		8000 - 2222	9000 - 2500
Sound pressure level	dB(A)	CO	56	57
Sound power level	dB(A)	CO	72	74
Operating range	°C	CO	-15 / +46	-15 / +46
Sound pressure level	dB(A)	HP	57	58
Sound power level	dB(A)	HP	74	75
Operating range	°C	HP	-20 / +15	-20 / +15
Dimensions (HxWxD)	mm		1540 x 900 x 320	1540 x 900 x 320
Weight	kg		134	134
Compressor type			DC Twin Rotary	DC Twin Rotary
Flare connections				
Gas	in		1 1/8	1 1/8
Liquid	in		1/2	1/2
Minimum pipe length	m		7,5	7,5
Maximum pipe length	m		70	70
Maximum height difference	m		30	30
Chargeless pipe length	m		30	30
Power supply	V-ph-Hz		380/415-3N-50	380/415-3N-50

CO = cooling mode
HP = heating mode

R-410A HEAT PUMPS

DIGITAL/SUPER DIGITAL INVERTER

NEW DESIGN CEILING PANEL

Uniform air distribution

Light and easy to install

Three different setting modes

SM_UT
New 4-way cassette

Features

This new 4-way cassette is unobtrusive and flexible and can easily blend in with any room interior.
Thanks to the new ceiling panel, it grants uniform air distribution, providing total comfort. This system is ideal for small commercial applications.

Key features

Two louver shape options: straight flow louver and wide flow louver; optimum air distribution.

Light-weight unit, for easy and quick installation.

Built-in drain pump.

Simple maintenance, thanks to the Self-cleaning function and the Ag-ion tip for anti-mould in drain cap.

Individual setting of louver position:
3 different Swing modes: standard, diagonally opposite, turn-around.

Optional wired remote control RBC-AX31U(W)-E.

Performance data **with Super Digital Inverter Serie 4**

Outdoor unit			RAV-SP564AT-E	RAV-SP804AT-E	RAV-SP1104AT-E	RAV-SP1104AT8-E	RAV-SP1404AT-E	RAV-SP1404AT8-E	RAV-SP1604AT8-E
Indoor unit (Cassette)			RAV-SM564UT-E	RAV-SM804UT-E	RAV-SM1104UT-E	RAV-SM1104UT-E	RAV-SM1404UT-E	RAV-SM1404UT-E	RAV-SM1604UT-E
Cooling capacity	kW		5,3	7,1	10,0	10,0	12,5	12,5	14,0
Cooling range (min. - max.)	kW		1,2 - 5,6	1,9 - 8,0	2,6 - 12,0	2,6 - 12,0	2,6 - 14,0	2,6 - 14,0	2,6 - 16,0
Power input (min. - rated - max.)	kW	CO	0,20 - 1,47 - 1,95	0,30 - 1,86 - 2,52	0,64 - 2,21 - 3,88	0,66 -2,37- 3,60	0,64 - 3,16 - 4,21	0,66 - 3,46 - 4,40	0,66 - 4,49 - 5,70
EER			3,61	3,82	4,52	4,22	3,96	3,61	3,12
Energy efficiency class		CO	A	A	A	A	-	-	-
Annual energy consumption	kWh		735	930	1105	1185	1580	1730	2245
Heating capacity	kW		5,6	8,0	11,2	11,2	14,0	14,0	16,0
Heating range (min. - max.)	kW		0,9 - 8,1	1,3 - 11,3	2,4 - 13,0	2,4 - 15,6	2,4 - 16,5	2,4 - 18,0	2,4 - 19,0
Power input (min. - rated - max.)	kW	HP	0,15 - 1,21 - 2,40	0,25 - 1,91 - 3,52	0,52 - 2,34- 3.75	0,53 -2,42 - 4,30	0,52 - 3,21 - 4,50	0,53 -3,42 - 5,50	0,53 -4,30 - 6,51
COP			4,63	4,19	4,79	4,63	4,36	4,09	3,72
Energy efficiency class		HP	A	A	A	A	-	-	-

Performance data **with Digital Inverter Serie 3**

Outdoor unit			RAV-SM563AT-E	RAV-SM803AT-E	RAV-SM1103AT-E	RAV-SM1403AT-E	RAV-SM1603AT-E
Indoor unit (4-way Cassette)			RAV-SM564UT-E	RAV-SM804UT-E	RAV-SM1104UT-E	RAV-SM1404UT-E	RAV-SM1604UT-E
Cooling capacity	kW		5,3	6,7	10,0	12,0	14,0
Cooling range (min. - max.)	kW		1,5 - 5,6	1,5 - 8,0	3,0 - 11,2	3,0 - 13,2	3,0 - 16,0
Power input (min. - rated - max.)	kW	CO	0,35 -1,65 - 1,86	0,45 - 2,09 - 2,60	0,60 - 3,11- 4,10	0,65 -3,74 - 4,50	0,65 - 4,49 - 5,70
EER			3,21	3,21	3,22	3,21	3,12
Energy efficiency class		CO	A	A	A	A	-
Annual energy consumption	kWh		825	1045	1555	1870	2245
Heating capacity	kW		5,6	8,0	11,2	14,0	16,0
Heating range (min. - max.)	kW		1,5 - 6,3	1,5 - 9,0	3,0 - 13,0	3,0 - 16,0	3,0 - 18,0
Power input (min. - rated - max.)	kW	HP	0,35 -1,44 - 2,08	0,45 -2,21- 3,03	0,60 -2,93 - 4,30	0,65 - 3,80 - 4,50	0,65 - 4,43 - 6,51
COP			3,89	3,62	3,82	3,68	3,61
Energy efficiency class		HP	A	A	A	A	-

Physical data **indoor unit**

Indoor unit		RAV-SM564UT-E	RAV-SM804UT-E	RAV-SM1104UT-E	RAV-SM1404UT-E	RAV-SM1604UT-E
Air Flow (H/L)	m^3/h – l/s	1050/780 - 291/217	1230/810 - 341/225	2010/1170 - 558/325	2100/1230 - 583/341	2130/1260 - 592/350
Sound pressure level (H-M-L)	dB(A)	32-29-28	35-31-28	43-38-33	44-38-34	45-40-36
Sound power level (H-M-L)	dB(A)	47-44-43	50-46-43	58-53-48	59-53-49	60-55-51
Dimensions (HxWxD)	mm	256 × 840 × 840	256 × 840 × 840	319 × 840 × 840	319 × 840 × 840	319 × 840 × 840
Weight	kg	20	20	24	24	24
Panel dimensions (HxWxD)	mm	30×950×950	30×950×950	30×950×950	30×950×950	30×950×950
Panel weight	kg	4,2	4,2	4,2	4,2	4,2

CO = cooling mode
H = heating mode
H-M-L = High - Medium - Low speed

R-410A HEAT PUMPS

DIGITAL/SUPER DIGITAL INVERTER

COMPACT DIMENSIONS

Suitable for standard grid

Easy installation and maintenance

Slim and unobtrusive design

SM_MUT
Compact 4-way cassette

Features

This 4-way cassette has been designed to suit all standard 600 × 600 mm grid ceilings, for easy installation and maintenance.
Its compact design blends with any room interior, where appearance is as important as functionality.
Draught prevention and clean ceiling functions make this unit ideal for the most demanding applications.
When combined with the Super Digital Inverter outdoor unit, the highest energy label (A) is achieved.

Key features

Slim-line dimensions: this cassette is suitable for the most demanding installations where ceiling height is reduced.

Same dimensions for all capacities: the installation is always smart and elegant.

Easy maintenance: ease of access to the corner pockets facilitates installation and adjustment for perfect ceiling fitting.

Easy installation with a built-in drain pump.

TCC Link control panel makes control of the system flexible and simplifies maintenance.

Performance data **with Super Digital Inverter Serie 4**

Outdoor unit			RAV-SP404AT-E	RAV-SP454AT-E	RAV-SP564AT-E
Indoor unit (600X600 Cassette)			RAV-SM404MUT-E	RAV-SM454MUT-E	RAV-SM564MUT-E
Cooling capacity	kW		3,6	4,0	5,0
Cooling range (min. - max.)	kW		1,5 - 4,0	1,5 - 4,5	1,2 - 5,6
Power input (min. - rated - max.)	kW	CO	0,36 - 1,00 - 1,49	0,36 - 1,19 - 1,49	0,21 - 1,56 - 2.29
EER	W/W		3,60	3,36	3,21
Energy efficiency class		CO	A	A	A
Annual energy consumption	kWh		500	595	780
Heating capacity	kW		4,0	4,5	5,6
Heating range (min. - max.)	kW		1,5 - 5,0	1,5 - 5,6	0,9 - 7,4
Power input (min. - rated - max.)	kW	HP	0,36 - 0,97 - 2,20	0,36 - 1,16 - 2,30	0,17 - 1,54 - 2,37
COP	W/W		4,12	3,88	3,64
Energy efficiency class		HP	A	A	A

Performance data **with Digital Inverter Serie 3**

Outdoor unit			RAV-SM563AT-E
Indoor unit (600X600 Cassette)			RAV- SM564MUT-E
Cooling capacity	kW		5,0
Cooling range (min. - max.)	kW		1,5 - 5,6
Power input	kW	CO	0,40 - 1,61 - 1,86
EER	W/W		3,11
Energy efficiency class		CO	B
Annual energy consumption	kWh		805
Heating capacity	kW		5,6
Heating range (min. - max.)	kW		1,5 - 6,3
Power input	kW	HP	0,40 - 1,61 -2,40
COP	W/W		3,48
Energy efficiency class		HP	B

Physical data **indoor unit**

Indoor unit		RAV-SM404MUT-E	RAV-SM454MUT-E	RAV- SM564MUT-E
Air Flow (H/L)	m^3/h – l/s	660/468 - 183/130	660/468 - 183/130	798/546 - 222/152
Sound pressure level (H-M-L)	dB(A)	40-36-31	40-36-31	43-39-34
Sound power level (H-M-L)	dB(A)	55-51-46	55-51-46	58-54-49
Dimensions (HxWxD)	mm	268 x 575 x 575	268 x 575 x 575	268 x 575 x 575
Weight	kg	17	17	17
Panel dimensions (HxWxD)	mm	27 x 700 x 700	27 x 700 x 700	27 x 700 x 700
Panel weight	kg	3	3	3

CO = cooling mode
HP = heating mode

H-M-L = High - Medium - Low speed

R-410A HEAT PUMPS

DIGITAL/SUPER DIGITAL INVERTER

DISCREET DUCTED UNITS

Infra-red control option

Discharge spigots as standard

High static pressure up to 98 Pa

SM_BT Ducted

Features

Whatever the shape of the room could be, ducted units ensure uniform temperatures in it.
The unit can be discreetly positioned in the walls or ceiling.
It's ideal for hotels, banks and similar applications, where very low noise levels are needed.

Key features

Wide range of applications: the use of ducts ensures flexible installations.

Improved room aesthetic: it's unobtrusive and discreet.

High static pressure: 98 Pa can be achieved and all the areas of the room can have the same temperature simultaneously.

High-lift drain pump kit: raises drain up to 290 mm for flexible condensate piping layout.

Performance data **with Super Digital Inverter Serie 4**

Outdoor unit			RAV-SP564AT-E	RAV-SP804AT-E	RAV-SP1104AT-E	RAV-SP1104AT8-E	RAV-SP1404AT-E	RAV-SP1404AT8-E
Indoor unit (Standard Duct)			RAV-SM564BT-E	RAV-SM804BT-E	RAV-SM1104BT-E	RAV-SM1104BT-E	RAV-SM1404BT-E	RAV-SM1404BT-E
Cooling capacity	kW		5,0	7,1	10,0	10,0	12,5	12,5
Cooling range (min. - max.)	kW		1,2 - 5,6	1,9 - 8,0	2,6 - 12,0	2,6 - 12,0	2,6 - 14,0	2,6 - 14,0
Power input (min. - rated - max.)	kW	CO	0,21 - 1,56 - 2,05	0,30 - 2,21 - 2,88	0,64 - 2,94 - 3,80	0,66 - 2,94 - 4,01	0,64 - 3,83 - 4,47	0,66 - 3,86 - 4,89
EER			3,21	3,21	3,40	3,40	3,26	3,24
Energy efficiency class		CO	A	A	A	A	-	-
Annual energy consumption	kWh		780	1105	1470	1470	1915	1930
Heating capacity	kW		5,6	8,0	11,2	11,2	14,0	14,0
Heating range (min. - max.)	kW		0,9 - 7,4	1,3 - 10,6	2,4 - 13,0	2,40 - 14,0	2,4 - 16,5	2,40 - 18,0
Power input (min. - rated - max.)	kW	HP	0,17 - 1,55 - 2,51	0,27 - 2,21 - 3,50	0,52 - 2,77 - 4,00	0,53 - 2,77 - 4,42	0,52 - 3,41 - 4,50	0,53 - 3,55 - 5,71
COP			3,61	3,62	4,04	4,04	4,11	3,94
Energy efficiency class		H P	A	A	A	A	-	-

Performance data **with Digital Inverter Serie 3**

Outdoor unit			RAV-SM563AT-E	RAV-SM803AT-E	RAV-SM1103AT-E	RAV-SM1403AT-E
Indoor unit (Standard Duct)			RAV-SM564BT-E	RAV-SM804BT-E	RAV-SM1104BT-E	RAV-SM1404BT-E
Cooling capacity	kW		5,0	7,1	10,0	12,5
Cooling range (min. - max.)	kW		1,5 - 5,6	1,5 - 7,4	3,0 - 12,5	3,0 - 13,2
Power input (min. - rated - max.)	kW	CO	0,45 - 1,78 - 1,95	0,50 - 2,53 - 2,76	0,60 - 3,56 - 4,50	0,65 - 4,42 - 4,85
EER			2,81	2,81	2,81	2,83
Energy efficiency class		CO	C	C	C	-
Annual energy consumption	kWh		890	1265	1780	2210
Heating capacity	kW		5,6	8,0	11,2	14,0
Heating range (min. - max.)	kW		1,5 - 6,3	1,5 - 9,0	3,0 - 12,5	3,0 - 16,0
Power input (min. - rated - max.)	kW	HP	0,45 - 1,71 - 2,47	0,50 - 2,41 - 3,18	0,60 - 3,14 - 4,00	0,65 - 4,03 - 4,55
COP			3,27	3,32	3,57	3,47
Energy efficiency class		HP	C	C	B	-

Physical data **indoor unit**

Indoor unit		RAV-SM564BT-E	RAV-SM804BT-E	RAV-SM1104BT-E	RAV-SM1404BT-E
Air Flow (H/L)	m^3/h – l/s	780/588 - 217/163	1140/798 - 317/222	1620/1134 - 450/315	1980/1386 - 550/385
Sound pressure level (H-M-L)	dB(A)	40-37-33	40-37-34	42-39-36	44-41-38
Sound power level (H-M-L)	dB(A)	55-52-48	55-52-49	57-54-51	59-56-53
Dimensions (HxWxD)	mm	320 x 700 x 800	320 x 1000 x 800	320 x 1350 x 800	320 x 1350 x 800
Weight	kg	30	39	54	54
External static pressure (stand/upper limit)	Pa	40/100	40/100	40/100	40/90

CO = cooling mode
HP = heating mode
H-M-L = High - Medium - Low speed

R-410A HEAT PUMPS

DIGITAL/SUPER DIGITAL INVERTER

1,5 – 2 HP RANGE

Slim profile

Self cleaning

SM_SDT Slim Duct

Features

Very compact design unit with low height dimension for flexible ceiling installations. Combines with the new small sizes of the high performances Super Digital Inverter outdoor units, for commercial applications which require limited power (1,5 HP).

Key features

High energy efficiency performances in cooling and heating.

Two choice of selection for the air inlet section: bottom or back side.

Natural drain discharge port and drain pump (up to 850 mm).

Easy to install and service.

Cleanable prefilter included.

Fresh air inlet possibility via a pre-punched knock hole.

Performance data **with Super Digital Inverter Serie 4**

Outdoor unit			RAV-SP404AT-E	RAV-SP454AT-E	RAV-SP564AT-E
Indoor unit (Slim duct)			RAV-SM404SDT-E	RAV-SM454SDT-E	RAV-SM564SDT-E
Cooling capacity	kW		3,6	4,0	5,0
Cooling range (min. - max.)	kW		1,5 - 4,0	1,5 - 4,5	1,2 - 5,6
Power input (min. - rated - max.)	kW	CO	0,37 - 1,03 - 1,25	0,37 - 1,2 - 1,49	0,21 - 1,56 - 2,29
EER	W/W		3,50	3,33	3,21
Energy efficiency class		CO	A	A	A
Annual energy consumption	kWh		515	600	780
Heating capacity	kW		4,0	4,5	5,6
Heating range (min. - max.)	kW		1,5 - 5,0	1,5 - 5,6	0,9 - 7,4
Power input (min. - rated - max.)	kW	HP	0,37 - 1,00 - 2,20	0,37 - 1,15 - 2,30	0,17 - 1,44 - 2,37
COP	W/W		4,00	3,91	3,89
Energy efficiency class		HP	A	A	A

Performance data **with Digital Inverter Serie 3**

Outdoor unit			RAV-SM563AT-E
Indoor unit (Slim duct)			RAV-SM564SDT-E
Cooling capacity	kW		5,0
Cooling range (min. - max.)	kW		1,5 - 5,6
Power input (min. - rated - max.)	kW	CO	0,21 - 1,66 - 2,78
EER	W/W		3,01
Energy efficiency class		CO	B
Annual energy consumption	kWh		830
Heating capacity	kW		5,6
Heating range (min. - max.)	kW		1,5 - 6,3
Power input (min. - rated - max.)	kW	HP	0,38 - 1,59 - 2,40
COP	W/W		3,52
Energy efficiency class		HP	B

Physical data **indoor unit**

Indoor unit		RAV-SM404SDT-E	RAV-SM454SDT-E	RAV-SM564SDT-E
Air Flow (H/L)	m^3/h – l/s	690/522 - 192/145	690/522 - 192/145	780/582 - 217/162
Sound pressure level (H-M-L)*	dB(A)	39-36-33	39-36-33	45-40-36
Sound power level (H-M-L)*	dB(A)	54-51-48	54-51-48	60-55-51
Dimensions (HxWxD)	mm	210 x 845 x 645	210 x 845 x 645	210 x 845 x 645
Weight	kg	22	22	22
External static pressure (stand/upper limit)	Pa	5/24	5/24	4/24

CO = cooling mode
HP = heating mode
*bottom air inlet

R-410A HEAT PUMPS

DIGITAL/SUPER DIGITAL INVERTER

DRAIN PUMP KIT

Easy service and installation

High efficiency filters

Up to 196 Pa

Wide range of options

SM_DT
Hi-static pressure ducted unit

Features

This is Toshiba's most powerful ducted unit delivering air flows up to 5040 m^3/h. Unobtrusive, flexible and compact, it can be installed easily and discretely in any interior.
This model is the ideal solution for both new and refurbishing buildings.

Key features

Easy installation.

Inspection hole enables easy access and maintenance.

Wide range of options available: filter chamber, long-life filter, drain pump kit, etc.

Static pressure can be set to 3 levels (68,6, 137 and 196 Pa).

Performance data **with Big DI serie 4**

Outdoor unit			RAV-SM2244AT8-E	RAV-SM2804AT8-E
Indoor unit (High Static duct)			RAV-SM2242DT-E	RAV-SM2802DT-E
Cooling capacity	kW		20,0	23,0
Cooling range (min. - max.)	kW		9,8 - 22,4	9,8 - 27,0
Power input (min. - rated - max.)	kW	CO	3,26 - 7,20 - 9,09	3,36 - 8,75 - 12,76
EER	W/W		2,78	2,63
Energy efficiency class		CO	-	-
Annual energy consumption	kWh		3600	4375
Heating capacity	kW		22,4	27,0
Heating range (min. - max.)	kW		9,8 - 25,0	9,8 - 31,5
Power input (min. - rated - max.)	kW	HP	2,57 - 6,49 - 7,45	2,57 - 8,15 - 11,01
COP	W/W		3,45	3,31
Energy efficiency class		HP	-	-

Physical data **indoor unit**

Indoor unit		RAV-SM2242DT-E	RAV-SM2802DT-E
Air Flow (H/L)	m^3/h – l/s	3600 - 1000	4200 - 1167
Sound pressure level	dB(A)	54	55
Sound power level	dB(A)	74	75
Dimensions (HxWxD)	mm	470 x 1380 x 1250	470 x 1380 x 1250
Weight	kg	160	160
External static pressure (H/M/L)	Pa	196/137/68,6	196/137/68,6

CO = cooling mode
HP = heating mode
H-M-L = High - Medium - Low speed

R-410A HEAT PUMPS

DIGITAL/SUPER DIGITAL INVERTER

CEILING-SUSPENDED UNITS

Low noise levels

Slim-line design

Automatic louvre control plus auto-swing

SM_CT Ceiling

Features

These ceiling suspended units are the ideal solution for offices, classrooms and restaurants.
The automatic louvre control and low noise levels are the key characteristics of this state-of-the-art unit.
In addition, the drain pan inside the unit ensures the maximum hygiene and is easily recyclable thanks to its stain resistant polypropylene resin body.

Key features

It operates at only 30 dB(A) (in 2HP) – twice as quietly as conventional units, thanks to its new design.

Optimum louvre control: the air flow angle is automatically set to the most suitable setting, and an automatic swing mode ensures air flow reaches all areas of the room.

Installation efficiency: for ceiling mounting, the unit can be suspended simply by adjusting 2 screws on the intake grille (compared to a dozen screws for conventional models).

Performance data **with Super Digital Inverter Serie 4**

Outdoor unit			RAV-SP564AT-E	RAV-SP804AT-E	RAV-SP1104AT-E	RAV-SP1104AT8-E	RAV-SP1404AT-E	RAV-SP1404AT8-E
Indoor unit (Ceiling)			RAV-SM564CT-E	RAV-SM804CT-E	RAV-SM1104CT-E	RAV-SM1104CT-E	RAV-SM1404CT-E	RAV-SM1404CT-E
Cooling capacity	kW		5,0	7,1	10,0	10,0	12,5	12,5
Cooling range (min. - max.)	kW		1,2 - 5,6	1,9 - 8,0	2,6 - 12,0	2,6 - 12,0	2,6 - 14,0	2,6 - 14,0
Power input (min. - rated - max.)	kW	CO	0,21 - 1,56 - 2,26	0,30 - 2,21 - 2,88	0,64 - 2,67 - 3,70	0,66 - 2,79 - 3,81	0,64 - 3,73 - 4,47	0,66 - 3,83 - 4,85
EER	W/W		3,21	3,21	3,75	3,58	3,35	3,26
Energy efficiency class		CO	A	A	A	A	-	-
Annual energy consumption	kWh		780	1105	1335	1395	1865	1915
Heating capacity	kW		5,6	8,0	11,2	11,2	14.0	14,0
Heating range (min. - max.)	kW		0,9 - 7,4	1,3 - 10,6	2.4 - 13.0	2,40 - 14,0	2.4 - 16.5	2,40 - 18,0
Power input (min. - rated - max.)	kW	HP	0,17 - 1,47 - 2,34	0,27 - 2,16 - 3,50	0,52 - 2,62 - 4,00	0,53 - 2,67 - 4,26	0,52 - 3,65 - 4,60	0,53 - 3,70 - 5,95
COP	W/W		3,81	3,70	4,27	4,19	3,84	3,78
Energy efficiency class		HP	A	A	A	A	-	-

Performance data **with Digital Inverter Serie 3**

Outdoor unit			RAV-SM563AT-E	RAV-SM803AT-E	RAV-SM1103AT-E	RAV-SM1403AT-E
Indoor unit (Ceiling)			RAV-SM564CT-E	RAV-SM804CT-E	RAV-SM1104CT-E	RAV-SM1404CT-E
Cooling capacity	kW		5,0	7,0	10,0	12,3
Cooling range (min. - max.)	kW		1,5 - 5,6	1,5 - 7,4	3,0 - 11,2	3,0 - 13,2
Power input (min. - rated - max.)	kW	CO	0,45 - 1,82 - 1,95	0,50 - 2,53 - 2,76	0,60 - 3,51 - 4,10	0,65 - 4,52 - 4,85
EER	W/W		2,75	2,77	2,85	2,72
Energy efficiency class		CO	D	D	C	-
Annual energy consumption	kWh		910	1265	1755	2260
Heating capacity	kW		5,6	8,0	11,2	14
Heating range (min. - max.)	kW		1,5 - 6,3	1,5 - 9,0	3,0 - 12,5	3,0 - 16,0
Power input (min. - rated - max.)	kW	HP	0,45 - 1,64 - 2,40	0,50 - 2,47 - 3,20	0,60 - 3,20 - 4,10	0,65 - 4,14 - 4,60
COP	W/W		3,41	3,24	3,50	3,38
Energy efficiency class		HP	B	C	B	-

Physical data **indoor unit**

Indoor unit		RAV-SM564CT-E	RAV-SM804CT-E	RAV-SM1104CT-E	RAV-SM1404CT-E
Air Flow (H/L)	m^3/h – l/s	780/600 - 217/167	1110/876 - 308/243	1650/1270 - 458/352	1800/1386 - 500/385
Sound pressure level (H-M-L)	dB(A)	38-33-30	38-36-33	41-38-35	43-40-37
Sound power level (H-M-L)	dB(A)	51-48-45	53-51-48	56-53-50	58-55-52
Dimensions (HxWxD)	mm	210 x 910 x 680	210 x 1180 x 680	210 x 1595 x 680	210 x 1595 x680
Weight	kg	21	25	33	33

CO = cooling mode
HP = heating mode
H-M-L = High - Medium - Low speed

R-410A HEAT PUMPS

DIGITAL/SUPER DIGITAL INVERTER

STYLISH DESIGN

Slim design

4 levels of filtration

SM_4KRT High-wall

Features

With its attractive and slim-line design, this high-wall is suitable for offices, restaurants and other applications where elegance is required.

The filtration system further improves the indoor air quality benefits of this high-wall unit.

Key features

With its slim design, this compact and stylish unit blends with any room setting.

Enhanced filtration system: Zeolite Plus + Sasa filter to deodorise, Bio-Enzyme filter + Gingko filter to purify and new antioxidant Vitamin C filter.

Auto louvre mode allows optimum air distribution throughout.

Wireless controller included.

TCC Link remote control (optional).

Performance data **with Super Digital Inverter Serie 4**

Outdoor unit			RAV-SP564AT-E	RAV-SP804AT-E
Indoor unit (High-wall)			RAV-SM564KRT-E	RAV-SM-804KRT-E
Cooling capacity	kW		5	6,9
Cooling range (min. - max.)	kW		1,2 - 5,6	1,9 - 8,0
Power input (min. - rated - max.)	kW	CO	0,21 - 1,56 - 2,05	0,3 - 2,40 - 2,88
EER			3,21	2,88
Energy efficiency class		CO	A	C
Annual energy consumption	kWh		780	1200
Heating capacity	kW		5,6	8
Heating range (min. - max.)	kW		0,9 - 7,3	1,3 - 10,6
Power input (min. - rated - max.)	kW	HP	0,17 - 1,55 - 2,57	0,27 - 2,40 - 3,87
COP			3,61	3,33
Energy efficiency class		HP	A	C

Performance data **with Digital Inverter Serie 3**

Outdoor unit			RAV-SM563AT-E	RAV-SM803AT-E
Indoor unit (High-wall)			RAV-SM564KRT-E	RAV-SM804KRT-E
Cooling capacity	kW		5,1	6,7
Cooling range (min. - max.)	kW		1,5 - 5,6	1,5 - 8,0
Power input (min. - rated - max.)	kW	CO	0,40 - 1,74 - 1,86	0,50 - 2,72 - 2,85
EER			2,93	2,46
Energy efficiency class		CO	C	E
Annual energy consumption	kWh		870	1360
Heating capacity	kW		5,6	8
Heating range (min. - max.)	kW		1,5 - 6,3	1,5 - 9,0
Power input (min. - rated - max.)	kW	HP	0,40 - 1,70 - 2,40	0,50 - 2,67 - 3,46
COP			3,29	3
Energy efficiency class		HP	C	D

Physical data **indoor unit**

Indoor unit		RAV-SM564KRT-E	RAV-SM804KRT-E
Air Flow (h/l)	m^3/h – l/s	840/642 - 233/178	1110/732 - 308/203
Sound pressure level (H-M-L)	dB(A)	39-36-33	45-41-36
Sound power level (H-M-L)	dB(A)	54-51-48	60-56-51
Dimensions (HxWxD)	mm	298 x 998 x 221	298 x 998 x 221
Weight	kg	12	12

CO = cooling mode
HP = heating mode
H-M-L = High - Medium - Low speed

R-410A HEAT PUMPS

DIGITAL INVERTER

CEILING-SUSPENDED/ CONSOLE UNIT

Triple action filtration system

Two installation layouts

SM_XT Flexi

Features

The stylish Flexi unit can add a touch of elegance to a commercial space. Installation flexibility and indoor air quality are two of the many advantages of the system.

Key features

Ultimate flexibility: low wall and ceiling-suspended installations are both possible, with no modification or additional accessories.

Triple-action filtration system: the first step removes large particles, then a passive electrostatic filter removes solid particles down to 0,01 micron in size and finally the Zeolite Plus filter absorbs even smaller airborne pollutants.

Natural air distribution: in ceiling-suspended applications, air can be directed either horizontally, parallel to the ceiling or away from the room occupants for non intrusive air distribution.

High-lift drain pump kit: raises drain piping up to 290 mm for flexible condensate piping layout (option suitable for ceiling suspended unit only).

Performance data **with Digital Inverter Serie 3**

Outdoor unit			RAV-SM563AT-E	RAV-SM803AT-E
Indoor unit (Flexi)			RAV-SM562XT-E	RAV-SM802XT-E
Cooling capacity	kW		5,0	6,7
Cooling range (min. - max.)	kW		1,5 - 5,6	1,5 - 7,0
Power input (min. - rated - max.)	kW	CO	0,55 - 1,87 - 2,01	0,55 - 2,72 - 2,85
EER			2,67	2,46
Energy efficiency class		CO	D	E
Annual energy consumption	kWh		935	1360
Heating capacity	kW		5,6	8,0
Heating range (min. - max.)	kW		1,5 - 6,3	1,5 - 9,0
Power input (min. - rated - max.)	kW	HP	0,55 - 1,70 - 2,40	0,55 - 2,67 - 3,46
COP			3,29	3,00
Energy efficiency class		HP	C	D

Physical data **indoor unit**

Indoor unit		RAV-SM562XT-E	RAV-SM802XT-E
Air Flow (h/l)	m^3/h – l/s	840/600 - 233/178	1110/640 - 308/177
Sound pressure level (h-l)	dB(A)	43-36	46-37
Sound power level (h-l)	dB(A)	58-51	61-52
Dimensions (HxWxD)	mm	208 x 1093 x 633	208 x 1093 x 633
Weight	kg	23	23

CO = cooling mode
HP = heating mode