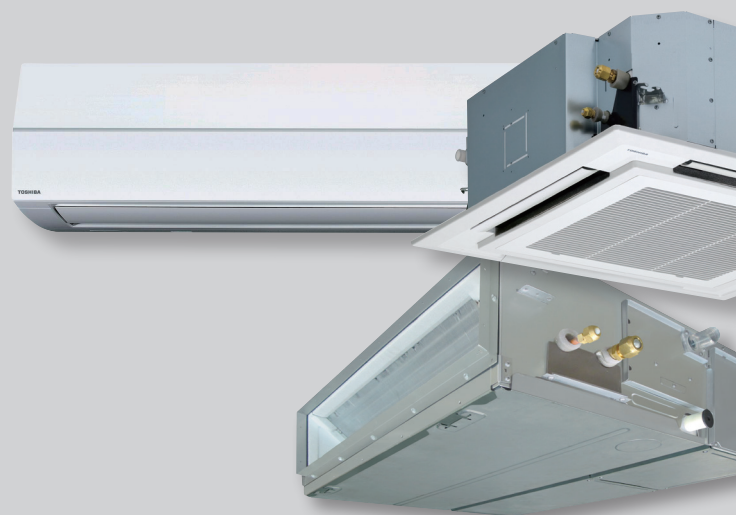
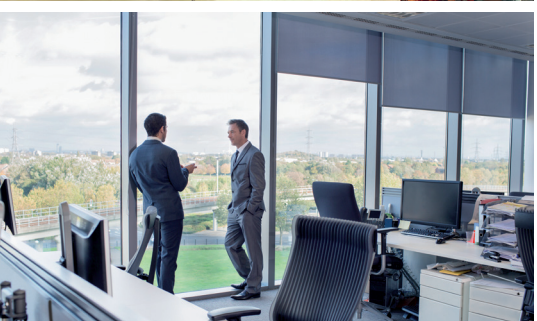


TOSHIBA Leading Innovation >>>



2017

SPLIT SYSTEMS
Air conditioning systems for commercial
and residential applications





RAS Range Air conditioning for residential use

Toshiba's innovative single-split systems employ advanced technologies that deliver superior comfort and peace of mind. The DC hybrid inverter technology ensures set room temperature is quickly reached and precisely maintained.

Quiet operation, air filtration and purification, self-cleaning and one-touch pre-sets are some of the many features that deliver efficient cooling and heating.

HIGH ENERGY EFFICIENCY

The Daiseikai unit achieves the highest level of energy efficiency, both in cooling and heating. The Toshiba Inverter Air Conditioner is another level of technology that has been developed for lifestyle today, tomorrow and in the future. The modern design creates fresh air for better quality of life with less energy consumption, and easier control with just one touch. An advanced technology that you can breathe, touch and experience.

COMFORT

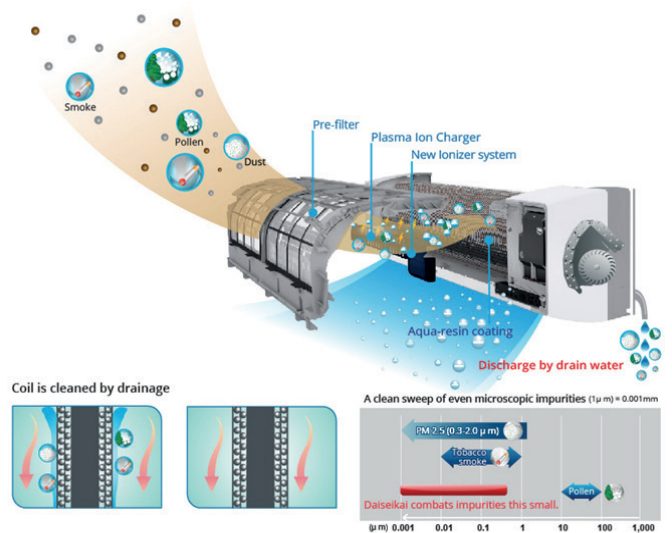
A complete filtration system that deodorises air and provides a pure and healthy environment. Plasma Ion Purifier System is a combination of Plasma Ion Charger and Ionizer system. The system has been developed to provide maximum IAQ to every user. Users can activate this feature by pressing the PURE button.

Air conditioners can get very dirty inside, collecting bacteria and allergens. Toshiba's Aqua Resin-coated coil reduces the formation of water or oil on the coil unit as well as minimises dust accumulating on the coil.

Self-cleaning system: the air conditioner will run on slow-speed for 20 minutes to dry the coil, which will effectively prevent any odour from mould or germs.

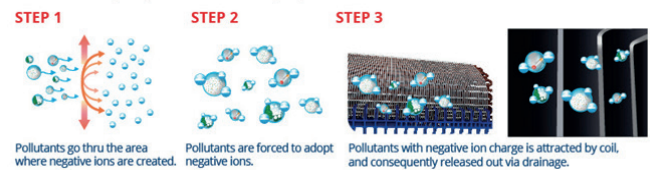
EASY CLEANING

All the components are designed for easy maintenance both in removal and re-assembly. Step-by-step maintenance procedures have never been easier.



Plasma Ion Charger

Plasma ion charger operates in 3 following steps:



The future is now

Innovation, efficiency, high reliability, energy savings, environmental respect ... These are the powerful values at the heart of Toshiba's DNA. For over 50 years Toshiba has been providing its clients with the guaranteed accuracy and expertise of flawless Japanese quality.

Technological, stylish, highly efficient and environmentally-friendly, the new Toshiba high-wall unit proudly upholds the values rooted firmly in its name: in Japanese, MIRAI means FUTURE.

The new MIRAI heating and cooling system was developed in high-performance design and engineering facilities. It offers unbeatable comfort and exceptional energy savings.



ENERGY EFFICIENCY BY DESIGN

Toshiba products are designed to optimise energy performance at any time of year. This in turn reduces the amount of indirect CO₂ emissions generated by electricity consumption.

LOW REFRIGERANT CHARGE

Toshiba is committed to minimising the refrigerant charge of its products and has made this a key performance indicator for all new product development.

WELL-BEING AT ITS QUIETEST



MIRAI guarantees well-being at its best - and at its quietest! Throughout its development, the utmost care and attention was paid to keeping sound to an absolute minimum. And that makes the new high-wall unit the quietest in its category down to 22 dB(A).

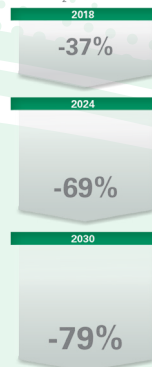
MIRAI is available with heating only or cooling only mode options, to minimise energy bills. The Heating Only mode is ideal for residential applications where cooling is not required. It is compliant with specific applications and some local building regulations.

EUROPEAN F-GAS REGULATION: R32 IS THE RIGHT ALTERNATIVE TO R410A

The European F-gas regulation (517/2014) has been in force since 1 January 2015 and will progressively phase down the use of hydrofluorocarbons (HFCs) in the heating and cooling systems of the future. Toshiba already offers new heating and cooling systems operating with R32, which will be the alternative to R410A in the years ahead. The new R32 refrigerant ensures an ideal balance between energy-efficiency and respect for the environment. The quantities of HFCs that are placed on the market will be gradually reduced in a step-by-step approach, until they finally reach a minimum level by 2030.

R32
with TOSHIBA

HFC consumption related to tons of CO₂ equivalent



Advanced control

Well-being on demand

Toshiba offers simple-to-use automation solutions that gives the user direct or remote control of the ambient temperature of every room.

They can achieve bespoke comfort through high-precision management and programming of air conditioning or heating, and that means exceptional energy consumption control. In short, comfort and quality of life that are fully in line with individual requirements.

STANDARD REMOTE CONTROL

Combining all essential functions, it offers rapid access to Economy and High Power modes and includes mode adjustments, fan speed, set point and air flow direction as standard.



WEEKLY REMOTE CONTROL

This optional high-end remote control ensures total control of the temperature of each room. Its backlit screen displays all data via simple and user-friendly navigation. Three basic function keys – start, command change, favourite settings – are accessible directly below the screen, while advanced functions can be accessed by lifting the protective cover. The timer function allows up to 4 daily settings, or 28 programs per 7-day period.



Anytime, anywhere

With the comfort of its users in mind, Toshiba offers remote functions that make everyday life simpler. As a truly connected object, indoor units can be utilised

anytime, anywhere, thanks to a series of SMS or Wi-Fi remote control solutions that offer maximum wellbeing and optimised energy savings.

CONTROL VIA GSM AND SMS

Remote control via an IOS or Android smartphone is possible by downloading the dedicated “Combi Control” app. This then uses SMS to send standard commands directly to the Combi Control box installed at home. The result is made-to-measure comfort in just a few secure clicks.



CONTROL VIA WI-FI

Remote control uses INTESIS HOME, an infra-red box installed close to the indoor unit. Settings are simple to control from an IOS or Android Smartphone or tablet with a Wi-Fi connection. Its sleek design blends harmoniously into any home décor.



Indoor units: Overview

Mirai high-wall unit

1.5 kW to 4.6 kW cooling capacity



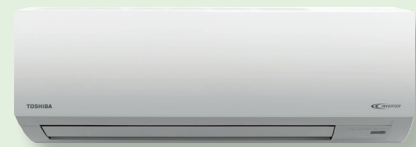
Daiseikai high-wall unit

2.5 kW to 4.5 kW cooling capacity



Suzumi high-wall unit

2.5 kW to 3.5 kW cooling capacity



Bi-Flow console unit

2.5 kW to 5.0 kW cooling capacity





Mirai high-wall units - R32

Mirai high-wall - R32

Technical data heat pump

Indoor unit			RAS-05BKVGE	RAS-07BKVGE	RAS-10BKVGE	RAS-13BKVGE	RAS-16BKVGE
Outdoor unit			RAS-05BAVGE	RAS-07BAVGE	RAS-10BAVGE	RAS-13BAVGE	RAS-16BAVGE
Nominal	Cooling capacity	kW	1.5	2.0	2.5	3.3	4.6
	Heating capacity	kW	2.0	2.5	3.2	3.6	5.4
	EER/COP	W/W	3.85/4.26	3.45/3.91	3.25/3.76	2.92/3.75	3.01/3.48
UK	Cooling total/sensible	kW	1.47/1.22	1.95/1.57	2.44/1.93	3.22/2.49	4.49/3.36
	Heating	kW	1.18	1.60	2.03	2.20	3.33
Cooling EN14825	Range min. - max.	kW	0.66 - 2.00	0.67 - 2.60	0.68 - 3.00	0.75 - 3.60	1.20 - 5.3
	Power input	kW	0.39	0.58	0.77	1.13	1.53
	Pdesign	kW	1.5	2.0	2.5	3.3	4.6
	SEER/energy efficiency class		5.60/A+	5.60/A+	5.70/A+	5.60/A+	6.20/A++
	Seasonal energy consumption	kWh/a	94	125	153	206	260
Heating EN14825	Range min. - max.	kW	0.54 - 3.00	0.55 - 3.30	0.71 - 3.90	0.72 - 4.50	0.93 - 6.40
	Power input	kW	0.47	0.64	0.85	0.96	1.55
	Pdesign	kW	1.6	2.0	2.4	2.8	4.0
	SCOP/energy efficiency class		4.00/A+	4.00/A+	4.00/A+	4.00/A+	4.20/A+
	Seasonal energy consumption	kWh/a	560	700	839	980	1334

Indoor unit			RAS-05BKVGE	RAS-07BKVGE	RAS-10BKVGE	RAS-13BKVGE	RAS-16BKVGE
Air flow	High - low	l/s	145 - 65	148 - 65	153 - 67	172 - 73	213 - 92
	High - low	m ³ /h	522 - 234	534 - 234	552 - 240	618 - 264	768 - 330
Sound	Pressure high - low	dB(A)	37 - 22	38 - 23	39 - 24	42 - 24	43 - 25
	Power high - low	dB(A)	54 - 37	55 - 37	56 - 38	57 - 39	58 - 41
Unit	Height x width x depth	mm	293 x 798 x 230	293 x 798 x 230	293 x 798 x 230	293 x 798 x 230	293 x 798 x 230
	Weight	kg	9	9	9	9	10
Pipe connection	Flare connections (gas - liquid)	inch	3/8 - 1/4	3/8 - 1/4	3/8 - 1/4	3/8 - 1/4	1/2 - 1/4
	Drain pipe connection OD/ID	mm	VP16/14	VP16/14	VP16/14	VP16/14	VP16/14
Remote controller			WH-UA01NE (Infra-Red)	WH-UA01NE (Infra-Red)	WH-UA01NE (Infra-Red)	WH-UA01NE (Infra-Red)	WH-UA01NE (Infra-Red)

Outdoor unit			RAS-05BAVGE	RAS-07BAVGE	RAS-10BAVGE	RAS-13BAVGE	RAS-16BAVGE
Operating range	Cooling/heating	°C	-15 to 46/-15 to 24	-15 to 46/-15 to 24	-15 to 46/-15 to 24	-15 to 46/-15 to 24	-15 to 46/-15 to 24
Air flow	High	m ³ /h - l/s	1800 - 500	1800 - 500	1860 - 517	1980 - 550	2160 - 600
Sound	Pressure high cooling/heating	dB(A)	48/50	48/50	49/51	50/51	50/52
	Power high cooling/heating	dB(A)	63/65	63/65	64/66	65/66	65/67
Unit	Height x width x depth	mm	530 x 660 x 240	530 x 660 x 240	530 x 660 x 240	530 x 660 x 240	550 x 780 x 290
	Weight	kg	21	21	21	22	34
Pipe connection	Flare connections (gas - liquid)	inch	3/8 - 1/4	3/8 - 1/4	3/8 - 1/4	3/8 - 1/4	1/2 - 1/4
	Min. - max. length	m	2-15	2-15	2-15	2-15	2-20
	Maximum height difference	m	±12	±12	±12	±12	±12
	Drain port connection	mm	16	16	16	16	16
Refrigerant R32	Base charge/chargeless length	kg/m	0.4/15	0.4/15	0.43/15	0.43/15	0.8/15
	Additional charge	g/m	20	20	20	20	20
Run current	Maximum	A	2.14	3.17	4.19	5.60	7.05
Power cable	Outdoor to indoor		3 core + earth	3 core + earth	3 core + earth	3 core + earth	3 core + earth
Power supply*	Suggested fuse size	V/ph/Hz-A	220-240/1/50-10	220-240/1/50-10	220-240/1/50-10	220-240/1/50-10	220-240/1/50-10

* Site installation option - power supply to outdoor or indoor

Accessories

RB-RXS30-E	Remote Controller Built-In Timer	Weekly-timer, single combination
RBC-IS-IR-WIFI-1	WIFI Controller	IntesisHome Wi-Fi Universal Controller
RBC-RASNC	RAS Network Card (to Central Controller)	Interface to enable U3/U4 connection



Mirai high-wall units - R410A

Mirai high-wall - R410A

Technical data heat pump

Indoor unit			RAS-07BKV-E	RAS-10BKV-E	RAS-13BKV-E	RAS-16BKV-E
Outdoor unit			RAS-07BAV-E	RAS-10BAV-E	RAS-13BAV-E	RAS-16BAV-E
Nominal	Cooling capacity	kW	2.0	2.5	3.1	4.4
	Heating capacity	kW	2.5	3.2	3.6	5.4
	EER/COP	W/W	3.33/4.03	2.94/3.81	2.70/3.75	2.82/3.42
UK	Cooling total/sensible	kW	1.95/1.68	2.44/2.03	3.03/2.44	4.30/3.80
	Heating	kW	1.40	1.78	2.01	3.21
Cooling EN14825	Range min. - max.	kW	0.64 - 2.50	0.67 - 3.10	0.75 - 3.50	1.1 - 4.8
	Power input	kW	0.60	0.85	1.15	1.56
	Pdesign	kW	2.0	2.5	3.1	4.4
	SEER/energy efficiency class		5.70/A+	5.60/A+	5.70/A+	5.90/A+
	Seasonal energy consumption	kWh/a	123	156	190	261
Heating EN14825	Range min. - max.	kW	0.55 - 3.20	0.70 - 3.90	0.70 - 4.50	0.80 - 6.10
	Power input	kW	0.62	0.84	0.96	1.52
	Pdesign	kW	1.8	2.4	2.8	4.0
	SCOP/energy efficiency class		4.00/A+	4.00/A+	4.00/A+	4.20/A+
	Seasonal energy consumption	kWh/a	630	840	980	1333

Indoor unit			RAS-07BKV-E	RAS-10BKV-E	RAS-13BKV-E	RAS-16BKV-E
Air flow	High - low	l/s	148 - 65	153 - 67	172 - 73	210 - 88
		m ³ /h	534 - 234	552 - 240	618 - 264	756 - 318
Sound	Pressure high - low	dB(A)	40 - 22	41 - 23	42 - 24	43 - 26
	Power high - low	dB(A)	55 - 37	56 - 38	57 - 39	58 - 41
Unit	Height x width x depth	mm	293 x 798 x 230	293 x 798 x 230	293 x 798 x 230	293 x 798 x 230
	Weight	kg	9	9	9	10
Pipe connection	Flare connections (gas - liquid)	inch	3/8 - 1/4	3/8 - 1/4	3/8 - 1/4	1/2 - 1/4
	Drain pipe connection OD/ID	mm	VP16/14	VP16/14	VP16/14	VP16/14
Remote controller			WH-UA01NE (Infra-Red)	WH-UA01NE (Infra-Red)	WH-UA01NE (Infra-Red)	WH-UA01NE (Infra-Red)

Outdoor unit			RAS-07BAV-E	RAS-10BAV-E	RAS-13BAV-E	RAS-16BAV-E
Operating range	Cooling/heating	°C	-15 to 46/-15 to 24	-15 to 46/-15 to 24	-15 to 46/-15 to 24	-15 to 46/-15 to 24
Air flow	High	m ³ /h - l/s	1800 - 500	1860 - 517	1980 - 550	2040 - 567
Sound	Pressure high cooling/heating	dB(A)	48/50	48/50	48/50	49/50
	Power high cooling/heating	dB(A)	62/64	63/65	64/65	64/65
Unit	Height x width x depth	mm	530 x 660 x 240	530 x 660 x 240	530 x 660 x 240	550 x 780 x 290
	Weight	kg	21	21	22	34
Pipe connection	Flare connections (gas - liquid)	inch	3/8 - 1/4	3/8 - 1/4	3/8 - 1/4	1/2 - 1/4
	Min.-Max. Length	m	2-15	2-15	2-15	2-20
	Maximum height difference	m	±12	±12	±12	±12
	Drain port connection	mm	16	16	16	16
Refrigerant R410A	Base charge/chargeless length	kg/m	0.48/15	0.52/15	0.58/15	0.90/15
	Additional charge	g/m	20	20	20	20
Run current	Maximum	A	3.17	4.19	5.60	7.05
Power cable	Outdoor to indoor		3 core + earth	3 core + earth	3 core + earth	3 core + earth
Power supply*	Suggested fuse size	V/ph/Hz-A	220-240/1/50-10	220-240/1/50-10	220-240/1/50-10	220-240/1/50-16

* Site installation option - power supply to outdoor or indoor

Accessories

RB-RXS30-E	Remote Controller Built-In Timer	Weekly-timer, single combination
RBC-IS-IR-WIFI-1	WIFI Controller	IntesisHome Wi-Fi Universal Controller
RBC-RASNC	RAS Network Card (to Central Controller)	Interface to enable U3/U4 connection



Daiseikai high-wall units

Daiseikai high-wall

Technical data heat pump

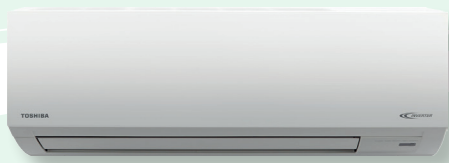
Indoor unit			RAS-B10N3KVP-E RAS-10N3AVP-E	RAS-B13N3KVP-E RAS-13N3AVP-E	RAS-B16N3KVP-E RAS-16N3AVP-E	RAS-10G2KVP-E RAS-10G2AVP-E	RAS-13G2KVP-E RAS-13G2AVP-E	RAS-16G2KVP-E RAS-16G2AVP-E
Nominal	Cooling capacity	kW	2.51	3.52	4.53	2.50	3.50	4.50
	Heating capacity	kW	3.21	4.22	5.53	3.20	4.00	5.50
	EER/COP	W/W	5.12/5.10	4.19/4.44	3.38/3.76	5.15/5.52	4.27/5.00	3.46/4.01
UK	Cooling total/sensible	kW	2.39/2.07	3.35/2.77	4.31/3.37	2.44/2.27	3.42/2.89	4.40/3.36
	Heating	kW	2.06	2.70	3.54	2.05	2.56	3.52
Cooling EN14825	Range min. - max.	kW	0.8 - 3.5	0.9 - 4.1	0.9 - 5.0	0.55 - 3.5	0.63 - 4.1	0.63 - 5.0
	Power input	kW	0.49	0.84	1.34	0.485	0.82	1.30
	Pdesign	kW	2.0	3.5	4.5	2.5	3.5	4.5
	SEER/energy efficiency class		8.50/A+++	7.00/A++	6.60/A++	9.10/A+++	8.90/A+++	7.30/A++
	Seasonal energy consumption	kWh/a	82	175	239	96	138	216
Heating EN14825	Range min. - max.	kW	0.8 - 5.8	0.8 - 5.9	0.8 - 6.7	0.45 - 5.8	0.65 - 6.3	0.65 - 6.8
	Power input	kW	0.63	0.95	1.47	0.58	0.80	1.37
	Pdesign	kW	2.8	3.0	3.8	3.0	3.6	4.5
	SCOP/energy efficiency class		4.60/A++	4.50/A+	4.30/A+	5.20/A+++	5.10/A+++	4.60/A++
	Seasonal energy consumption	kWh/a	852	933	1236	808	988	1369

Indoor unit			RAS-B10N3KVP-E	RAS-B13N3KVP-E	RAS-B16N3KVP-E	RAS-10G2KVP-E	RAS-13G2KVP-E	RAS-16G2KVP-E
Air flow	High - low	l/s	197 - 78	203 - 88	210 - 97	188 - 80	202 - 83	207 - 88
	High - low	m ³ /h	708 - 282	732 - 318	756 - 348	678 - 288	726 - 300	744 - 318
Sound	Pressure high - low	dB(A)	43 - 27	44 - 27	45 - 29	43 - 24 (20)	44 - 25 (21)	45 - 26 (23)
	Power high - low	dB(A)	58 - 42	59 - 42	60 - 44	58 - 39 (35)	59 - 40 (36)	60 - 41 (38)
Unit	Height x width x depth	mm	275 x 790 x 225	275 x 790 x 225	275 x 790 x 225	293 x 831 x 270	293 x 831 x 270	293 x 831 x 270
	Weight	kg	10	10	10	14	14	14
Pipe connection	Flare connections (gas - liquid)	inch	3/8 - 1/4	3/8 - 1/4	1/2 - 1/4	3/8 - 1/4	3/8 - 1/4	1/2 - 1/4
	Drain pipe connection OD/ID	mm	VP16/14	VP16/14	VP16/14	VP16/14	VP16/14	VP16/14
Remote controller			WH-TA01JE (Infra-Red)	WH-TA01JE (Infra-Red)	WH-TA01JE (Infra-Red)	WH-TA01EE (Infra-Red)	WH-TA01EE (Infra-Red)	WH-TA01EE (Infra-Red)

Outdoor unit			RAS-10N3AVP-E	RAS-13N3AVP-E	RAS-16N3AVP-E	RAS-10G2AVP-E	RAS-13G2AVP-E	RAS-16G2AVP-E
Operating range	Cooling/heating	°C	-10 to 46/-15 to 24	-10 to 46/-15 to 24	-10 to 46/-15 to 24	-10 to 46/-15 to 24	-10 to 46/-15 to 24	-10 to 46/-15 to 24
Air flow	High	m ³ /h - l/s	1800 - 500	2160 - 600	2520 - 700	1872 - 520	2160 - 600	2544 - 707
Sound	Pressure high cooling/heating	dB(A)	46/47	48/50	49/50	46/47	48/49	49/50
	Power high cooling/heating	dB(A)	61/62	63/65	64/65	61/62	63/64	64/65
Unit	Height x width x depth	mm	630 x 800 x 300	630 x 800 x 300	630 x 800 x 300	630 x 800 x 300	630 x 800 x 300	630 x 800 x 300
	Weight	kg	41	41	41	42	42	42
Pipe connection	Flare connections (gas - liquid)	inch	3/8 - 1/4	3/8 - 1/4	1/2 - 1/4	3/8 - 1/4	3/8 - 1/4	1/2 - 1/4
	Min. - max. Length	m	2-25	2-25	2-25	2-25	2-25	2-25
	Maximum height difference	m	±10	±10	±10	±10	±10	±10
	Drain port connection	mm	16	16	16	16	16	16
Refrigerant R410A	Base charge/chargeless length	kg/m	1.05/15	1.05/15	1.05/15	1.05/15	1.05/15	1.05/15
	Additional charge	g/m	20	20	20	20	20	20
Run current	Maximum	A	2.94	4.30	6.13	2.52	3.57	5.96
Power cable	Outdoor to indoor		3 core + earth	3 core + earth	3 core + earth	3 core + earth	3 core + earth	3 core + earth
Power supply	Suggested fuse size	V/ph/Hz-A	220-240/1/50-10	220-240/1/50-10	220-240/1/50-16	220-240/1/50-10	220-240/1/50-10	220-240/1/50-16

Accessories

RB-RXS30-E	Remote Controller Built-In Timer	Weekly-timer, single combination
RBC-IS-IR-WIFI-1	WIFI Controller	IntesisHome Wi-Fi Universal Controller



Suzumi high-wall units

Suzumi high-wall

Technical data heat pump

Indoor unit			RAS-B10N3KV2-E1	RAS-B13N3KV2-E1
Outdoor unit			RAS-10N3AV2-E1	RAS-13N3AV2-E1
Nominal	Cooling capacity	kW	2.5	3.5
	Heating capacity	kW	3.2	4.2
	EER/COP	W/W	4.18/4.27	3.33/3.89
UK	Cooling total/sensible	kW	2.44/2.03	3.42/2.74
	Heating	kW	2.05	2.61
Cooling EN14825	Range min. - max.	kW	1.1 - 3.0	1.1 - 4.05
	Power input	kW	0.598	1.05
	Pdesign	kW	2.5	3.5
	SEER/energy efficiency class		6.70/A++	6.50/A++
	Seasonal energy consumption	kWh/a	137	189
Heating EN14825	Range min. - max.	kW	0.9 - 4.8	1.0 - 5.3
	Power input	kW	0.75	1.08
	Pdesign	kW	2.9	3.2
	SCOP/energy efficiency class		4.30/A+	4.00/A+
	Seasonal energy consumption	kWh/a	944	1119

Indoor unit			RAS-B10N3KV2-E1	RAS-B13N3KV2-E1
Air flow	High - low	l/s	158 - 83	173 - 82
	High - low	m ³ /h	570 - 300	624 - 294
Sound	Pressure high - low	dB(A)	39 - 28	40 - 28
	Power high - low	dB(A)	54 - 43	55 - 43
Unit	Height x width x depth	mm	275 x 790 x 217	275 x 790 x 217
	Weight	kg	10	10
Pipe connection	Flare connections (gas - liquid)	inch	3/8 - 1/4	3/8 - 1/4
	Drain pipe connection OD/ID	mm	VP16/14	VP16/14
Remote controller			WH-TA04NE (Infra-Red)	WH-TA04NE (Infra-Red)

Outdoor unit			RAS-10N3AV2-E1	RAS-13N3AV2-E1
Operating range	Cooling/heating	°C	-10 to 46/-15 to 24	-10 to 46/-15 to 24
Air flow	High	m ³ /h - l/s	1800 - 500	2250 - 625
Sound	Pressure high cooling/heating	dB(A)	46/47	48/50
	Power high cooling/heating	dB(A)	61/62	63/65
Unit	Height x width x depth	mm	550 x 780 x 290	550 x 780 x 290
	Weight	kg	33	34
Pipe connection	Flare connections (gas - liquid)	inch	3/8 - 1/4	3/8 - 1/4
	Min.-max. Length	m	2-20	2-20
	Maximum height difference	m	±10	±10
	Drain port connection	mm	16	16
Refrigerant R410A	Base charge/chargeless length	kg/m	0.8/15	0.8/15
	Additional charge	g/m	20	20
Run current	Maximum	A	3.76	5.24
Power cable	Outdoor to indoor		3 core + earth	3 core + earth
Power supply	Suggested fuse size	V/ph/Hz-A	220-240/1/50-10	220-240/1/50-10

Accessories

RB-RXS30-E	Remote Controller Built-In Timer	Weekly-timer, single combination
RBC-IS-IR-WIFI-1	WIFI Controller	IntesisHome Wi-Fi Universal Controller



Bi-Flow console units

Bi-Flow console

Technical data heat pump

Indoor unit			RAS-B10UFV-E1	RAS-B13UFV-E1	RAS-B18UFV-E1
Outdoor unit			RAS-10N3AV2-E1	RAS-13N3AV2-E1	RAS-18N3AV2-E
Nominal	Cooling capacity	kW	2.5	3.5	5.0
	Heating capacity	kW	3.2	4.2	5.8
	EER/COP	W/W	4.20/4.27	3.33/3.36	3.01/3.21
UK	Cooling total/sensible	kW	2.44/2.03	3.42/2.74	4.88/3.67
	Heating	kW	1.99	2.6	3.71
Cooling EN14825	Range min. - max.	kW	1.1 - 3.1	1.1 - 4.1	1.1 - 5.7
	Power input	kW	0.595	1.05	1.66
	Pdesign	kW	2.5	3.5	5.0
	SEER/energy efficiency class		6.60/A++	6.30/A++	5.70/A+
	Seasonal energy consumption	kWh/a	133	194	307
Heating EN14825	Range min. - max.	kW	1.0 - 4.8	1.0 - 5.0	1.1 - 6.3
	Power input	kW	0.75	1.25	1.805
	Pdesign	kW	3.0	3.1	4.0
	SCOP/energy efficiency class		4.10/A+	4.00/A+	3.80/A
	Seasonal energy consumption	kWh/a	1024	1085	1474

Indoor unit			RAS-B10UFV-E1	RAS-B13UFV-E1	RAS-B18UFV-E1
Air flow	High - low	l/s	142 - 72	153 - 75	178 - 120
		m ³ /h	510 - 258	552 - 270	642 - 366
Sound	Pressure high - low	dB(A)	39 - 23	40 - 24	46 - 31
	Power high - low	dB(A)	54 - 38	55 - 39	61 - 46
Unit	Height x width x depth	mm	600 x 700 x 220	600 x 700 x 220	600 x 700 x 220
	Weight	kg	16	16	16
Pipe connection	Flare connections (gas - liquid)	inch	3/8 - 1/4	3/8 - 1/4	1/2 - 1/4
	Drain pipe connection OD/ID	mm	VP16/14	VP16/14	VP16/14
Remote controller			WH-L16SE (Infra-Red)	WH-L16SE (Infra-Red)	WH-L16SE (Infra-Red)

Outdoor unit			RAS-10N3AV2-E1	RAS-13N3AV2-E1	RAS-18N3AV2-E
Operating range	Cooling/heating	°C	-10 to 46/-15 to 24	-10 to 46/-15 to 24	-10 to 46/-15 to 24
Air flow	High	m ³ /h - l/s	1800 - 500	2250 - 625	2178 - 605
Sound	Pressure high cooling/heating	dB(A)	47	50	50
	Power high cooling/heating	dB(A)	62	65	64
Unit	Height x width x depth	mm	550 x 780 x 290	550 x 780 x 290	550 x 780 x 290
	Weight	kg	33	34	39
Pipe connection	Flare connections (gas - liquid)	inch	3/8 - 1/4	3/8 - 1/4	1/2 - 1/4
	Min.-max. Length	m	2-20	2-20	2-20
	Maximum height difference	m	±10	±10	±10
	Drain port connection	mm	16	16	16
Refrigerant R410A	Base charge/chargeless length	kg/m	0.8/15	0.8/15	1.4/15
	Additional charge	g/m	20	20	20
Run current	Maximum	A	4.17	6.02	8.49
Power cable	Outdoor to indoor		3 core + earth	3 core + earth	3 core + earth
Power supply	Suggested fuse size	V/ph/Hz-A	220-240/1/50-10	220-240/1/50-16	220-240/1/50-16

Accessories

RB-RXS30-E	Remote Controller Built-In Timer	Weekly-timer, single combination
RBC-IS-IR-WIFI-1	WIFI Controller	IntesisHome Wi-Fi Universal Controller



WOMEN
Footwear, Jewellery & Accessories
←

Up to...
Women's
Footwear,
Jewellery
& Accessories

This floor...
Women's wear

Down to...
Men's wear,
Men's Footwear
& Accessories

Lift at
back of store

Up to...
Women's
Footwear,
Jewellery
& Accessories

Lift at
back of store

Luxury through technology in RAS multi-split inverter systems

When it is necessary to provide a total comfort solution for a multi-room application, Toshiba multi-split inverter systems offer the perfect answer for any requirement.

One outdoor unit is capable of operating 2, 3, 4 or 5 indoor units, which are compact and elegant as they are designed to blend in with any room interior. In fact, Toshiba offers a wide range of possibilities to create all the comfort you need.

The full range of indoor units can satisfy every application: it includes unobtrusive ducted units, console units, compact 4-way cassette units and modern high-wall units, that provide hi-tech and sophisticated design and complete air filtration at the same time. Moreover, the efficient inverter systems are composed of high quality components: controls, electronics, motor, compressor.

Toshiba solutions are studied and verified in every tiny element and are recognised universally by air conditioning professionals for their total reliability. In fact, for Toshiba quality has always been a priority and today and into the future, the quality of Toshiba products will continue to differentiate it from other manufacturers.

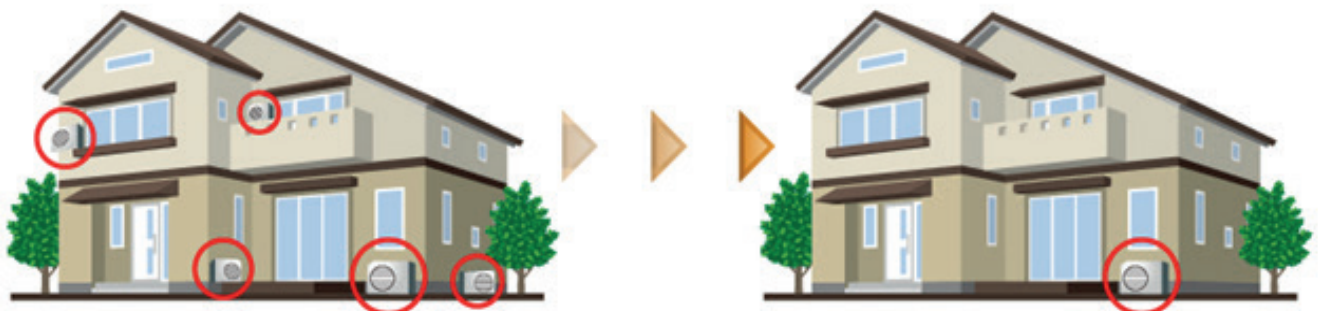
WIDE SELECTION

Choose from four types of indoor units to suit any housing design:

- high-wall
- console
- compact 4-way cassette
- ducted type

SPACE SAVING

Toshiba multi-split inverter system outdoor units are lightweight and compact. Just one outdoor unit takes up little space on a wall or in a yard. It keeps the exterior of buildings looking neat and offers quiet operating noise levels.



Full flexibility

Toshiba multi-split inverter systems provide the ultimate cooling and heating efficiency. Innovative inverter technology with twin-rotary compressors provide optimum performance to ensure your comfort and to suit your lifestyle.

Just one outdoor unit can serve up to five indoor rooms to provide exceptional flexibility, economy and reliability.



Energy saving

Quieter operation

Space saving

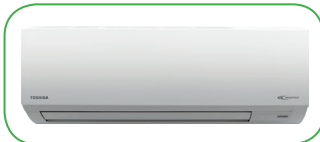
Ducted



High-wall



High-wall



Console



Compact 4-way cassette



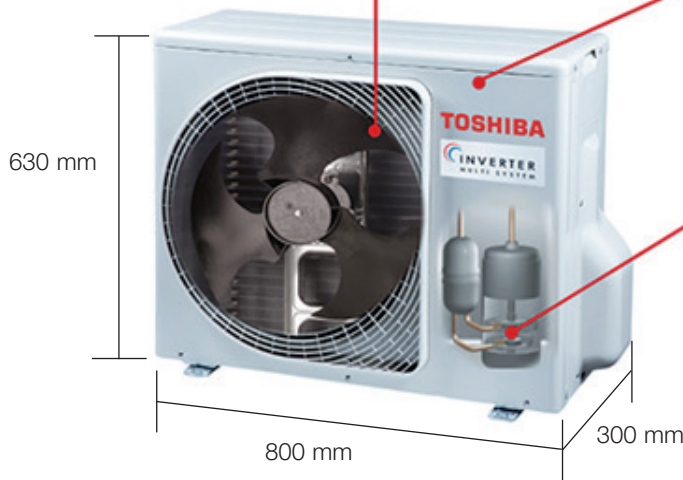
Toshiba's unique energy-efficient air conditioning technologies deliver energy savings

High efficiency propeller fan

- Improve the air flow efficiency of air flow while reducing energy consumption

New

Chassis



Inverter and compressor control

- Smooth compressor operation



Twin-rotary compressor

- Improved efficiency with the new motor and compressor unit
- Improved system efficiency with less oil discharged in the refrigeration circuit

RAS-2M14S3AV-E, RAS-2M18S3AV-E, RAS-3M18S3AV-E



HOW TO SELECT

- Step 1: Select the indoor unit to be installed in each room.
- Step 2: Select the best-matched outdoor unit based on the number of indoor units and the overall system capacity required.
- Step 3: Check system compatibility. Possible combinations vary depending on outdoor unit chosen.

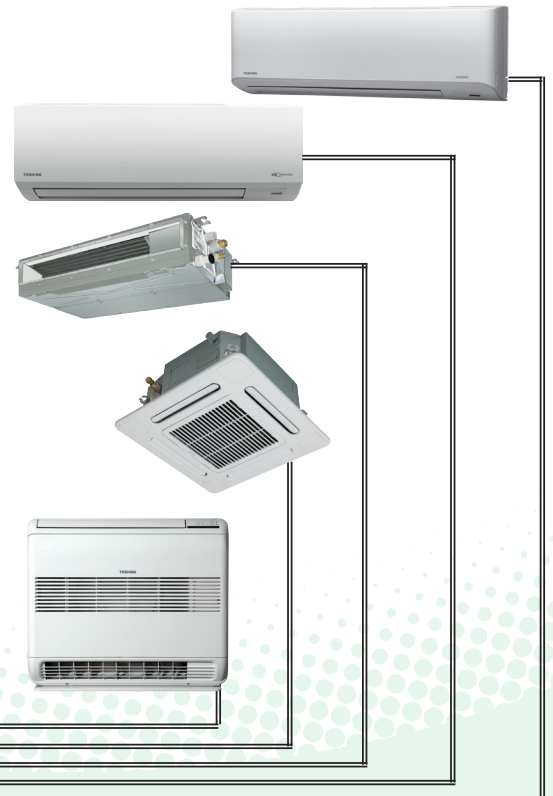
Note: Different types of indoor units can be connected in the same system. Please refer to the combination table for unit sizes available for each system combination.

4 x 1

2 x 1

5 x 1

3 x 1



RAS SPLIT SYSTEMS

Connectable units

Indoor unit type High-wall (N3KVP) High-wall (N3KV2) Console Ducted Compact 4-way cassette

Heat Pump



Indoor unit type	High-wall (N3KVP)	High-wall (N3KV2)	Console	Ducted	Compact 4-way cassette
RAS-2M14S3AV-E					
10	RAS-B10N3KVP-E	RAS-B10N3KV2-E1	RAS-B10UFV-E1	RAS-M10G3DV-E	RAS-M10SMUV-E
13	RAS-B13N3KVP-E	RAS-B13N3KV2-E1	RAS-B13UFV-E1	RAS-M13G3DV-E	RAS-M13SMUV-E
16	-	-	-	-	-
RAS-2M18S3AV-E					
10	RAS-B10N3KVP-E	RAS-B10N3KV2-E1	RAS-B10UFV-E1	RAS-M10G3DV-E	RAS-M10SMUV-E
13	RAS-B13N3KVP-E	RAS-B13N3KV2-E1	RAS-B13UFV-E1	RAS-M13G3DV-E	RAS-M13SMUV-E
16	RAS-B16N3KVP-E	RAS-B16N3KV2-E1	-	RAS-M16G3DV-E	RAS-M16SMUV-E
RAS-3M18S3AV-E					
10	RAS-B10N3KVP-E	RAS-B10N3KV2-E1	RAS-B10UFV-E1	RAS-M10G3DV-E	RAS-M10SMUV-E
13	RAS-B13N3KVP-E	RAS-B13N3KV2-E1	RAS-B13UFV-E1	RAS-M13G3DV-E	RAS-M13SMUV-E
16	RAS-B16N3KVP-E	RAS-B16N3KV2-E1	-	RAS-M16G3DV-E	RAS-M16SMUV-E
RAS-3M26S3AV-E					
10	RAS-B10N3KVP-E	RAS-B10N3KV2-E1	RAS-B10UFV-E1	RAS-M10G3DV-E	RAS-M10SMUV-E
13	RAS-B13N3KVP-E	RAS-B13N3KV2-E1	RAS-B13UFV-E1	RAS-M13G3DV-E	RAS-M13SMUV-E
16	RAS-B16N3KVP-E	RAS-B16N3KV2-E1	-	RAS-M16G3DV-E	RAS-M16SMUV-E
18	-	-	RAS-B18UFV-E1	-	-
RAS-4M27S3AV-E					
10	RAS-B10N3KVP-E	RAS-B10N3KV2-E1	RAS-B10UFV-E1	RAS-M10G3DV-E	RAS-M10SMUV-E
13	RAS-B13N3KVP-E	RAS-B13N3KV2-E1	RAS-B13UFV-E1	RAS-M13G3DV-E	RAS-M13SMUV-E
16	RAS-B16N3KVP-E	RAS-B16N3KV2-E1	-	RAS-M16G3DV-E	RAS-M16SMUV-E
18	-	-	RAS-B18UFV-E1	-	-
RAS-5M34S3AV-E					
10	RAS-B10N3KVP-E	RAS-B10N3KV2-E1	RAS-B10UFV-E1	RAS-M10G3DV-E	RAS-M10SMUV-E
13	RAS-B13N3KVP-E	RAS-B13N3KV2-E1	RAS-B13UFV-E1	RAS-M13G3DV-E	RAS-M13SMUV-E
16	RAS-B16N3KVP-E	RAS-B16N3KV2-E1	-	RAS-M16G3DV-E	RAS-M16SMUV-E
18	-	-	RAS-B18UFV-E1	-	-

Outdoor unit
Technical data

Outdoor unit			2 rooms		3 rooms		4 rooms	5 rooms
	RAS-		2M14S3AV-E	2M18S3AV-E	3M18S3AV-E	3M26S3AV-E	4M27S3AV-E	5M34S3AV-E
Cooling capacity	kW		4.0	5.2	5.2	7.5	8.0	10.0
Cooling capacity (min.-max.)	kW		1.6-4.9	1.7-6.2	2.4-6.5	4.1-9.0	4.2-9.3	3.7-11.0
Power input	kW	CO	0.83	1.34	1.17	2.00	2.29	2.98
EER	W/W		4.82	3.88	4.44	3.75	3.5	3.36
Heating capacity	kW		4.4	5.6	6.8	9.0	9.0	12.0
Heating capacity (min.-max.)	kW		1.3-5.2	1.3-7.5	1.9-8.0	2.0-11.2	2.9-11.7	2.7-14.0
Power input	kW	HP	0.85	1.19	1.58	2.20	1.93	2.83
COP	W/W		5.18	4.71	4.30	4.09	4.67	4.24
Air flow	m ³ /h-l/s	CO	1863-517	2107-585	2177-605	2507-696	2507-696	3562-989
Sound pressure level	dB(A)	CO	45	47	47	48	48	52
Sound power level	dB(A)	CO	58	60	60	63	63	66
Operating range	°C	CO	-10 ~ 46	-10 ~ 46	-10 ~ 46	-10 ~ 46	-10 ~ 46	-10 ~ 46
Sound pressure level	dB(A)	HP	46	50	50	49	49	55
Sound power level	dB(A)	HP	59	63	63	64	64	68
Operating range	°C	HP	-20 ~ 24	-20 ~ 24	-20 ~ 24	-15 ~ 24	-15 ~ 24	-15 ~ 24
Dimensions (h x w x d)	mm		630 x 800 x 300	630 x 800 x 300	630 x 800 x 300	890 x 900 x 320	890 x 900 x 320	890 x 900 x 320
Weight	kg		44	44	46	72	72	78
Compressor type			DC twin-rotary	DC twin-rotary	DC twin-rotary	DC twin-rotary	DC twin-rotary	DC twin-rotary
Flare connections - Gas	inch		3/8 x 2	3/8 x 2	3/8 x 2 + 1/2 x 1	3/8 x 1 + 1/2 x 2	3/8 x 2 + 1/2 x 2	3/8 x 3 + 1/2 x 2
Flare connections - Liquid	inch		1/4 x 2	1/4 x 2	1/4 x 3	1/4 x 3	1/4 x 4	1/4 x 5
Minimum-maximum pipe length	m		2-30	2-30	2-50	3-70	3-70	3-80
Maximum pipe length (per unit)	m		20	20	25	25	25	25
Maximum height difference	m		10	10	10	15	15	15
Chargeless pipe length	m		30	30	50	40	40	40
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

Rated conditions:

Cooling: indoor air temperature 27°C DB/19°C WB, outdoor air temperature 35°C DB

Heating: indoor air temperature 20°C DB, outdoor air temperature 7°C DB/6°C WB

2-, 3-, 4- and 5-room multi-split inverter system
2 ROOMS

 2M14S3AV-E
 2M18S3AV-E

3 ROOMS

3M18S3AV-E


3 ROOMS

RAS-3M26S3AV-E

4 ROOMS

RAS-4M27S3AV-E

5 ROOMS

RAS-5M34S3AV-E





HIGH-WALL N3KVP

Indoor unit			RAS-B10N3KVP-E	RAS-B13N3KVP-E	RAS-B16N3KVP-E
Air flow (c)	m ³ /h-l/s	CO	630-175	660-183	690-192
Sound pressure level (h/l)	dB(A)	CO	42/27	43/27	45/29
Sound power level (h/l)	dB(A)	CO	58/42	58/42	60/44
Air flow (h)	m ³ /h-l/s	HP	708-197	732-203	756-210
Sound pressure level (h/l)	dB(A)	HP	43/27	44/27	45/29
Sound power level (h/l)	dB(A)	HP	58/42	59/42	60/44
Dimensions (h x w x d)	mm		275 × 790 × 225	275 × 790 × 225	275 × 790 × 225
Weight	kg		10	10	10
Flare connections - Gas	inch		3/8	3/8	1/2
Flare connections - Liquid	inch		1/4	1/4	1/4
Remote controller			WH-TA01JE (infra-red)	WH-TA01JE (infra-red)	WH-TA01JE (infra-red)



HIGH-WALL N3KV2

Indoor unit			RAS-B10N3KV2-E1	RAS-B13N3KV2-E1	RAS-B16N3KV2-E1
Air flow (c)	m ³ /h-l/s	CO	516-143	570-158	684-190
Sound pressure level (h/l)	dB(A)	CO	38/26	39/26	45/30
Sound power level (h/l)	dB(A)	CO	53/41	54/41	60/45
Air flow (h)	m ³ /h-l/s	HP	570-158	624-173	738-205
Sound pressure level (h/l)	dB(A)	HP	39/28	40/28	45/31
Sound power level (h/l)	dB(A)	HP	54/43	55/43	60/46
Dimensions (h x w x d)	mm		275 × 790 × 217	275 × 790 × 217	275 × 790 × 217
Weight	kg		10	10	10
Flare connections - Gas	inch		3/8	3/8	1/2
Flare connections - Liquid	inch		1/4	1/4	1/4
Remote controller			WH-TA04NE (infra-red)	WH-TA04NE (infra-red)	WH-TA04NE (infra-red)



DUCTED G3DV

Indoor unit			RAS-M10G3DV-E	RAS-M13G3DV-E	RAS-M16G3DV-E
Air flow (c)	m ³ /h-l/s	CO	570-158	610-169	780-217
Sound pressure level (h/l)	dB(A)	CO	36/25	38/25	36/22
Sound power level (h/l)	dB(A)	CO	51/40	53/40	51/37
Air flow (h)	m ³ /h-l/s	HP	570-158	610-169	780-216
Sound pressure level (h/l)	dB(A)	HP	36/25	38/25	36/23
Sound power level (h/l)	dB(A)	HP	51/40	53/40	51/38
Dimensions (h x w x d)	mm		210 × 700 × 450	210 × 700 × 450	210 × 900 × 450
Weight	kg		16	16	19
Flare connections - Gas	inch		3/8	3/8	1/2
Flare connections - Liquid	inch		1/4	1/4	1/4
External static pressure (standard/middle1/middle2/upper)	Pa		10/20/35/45	10/20/35/45	10/20/35/45
Remote controller			WH-TA04NE (infra-red)	WH-TA04NE (infra-red)	WH-TA04NE (infra-red)

Indoor units
Technical data

**CONSOLE
UFV**

Indoor unit			RAS-B10UFV-E1	RAS-B13UFV-E1	RAS-B18UFV-E1
Air flow (c)	m ³ /h-l/s	CO	510-142	552-153	642-366
Sound pressure level (h/l)	dB(A)	CO	39/23	40/24	46/31
Sound power level (h/l)	dB(A)	CO	54/38	55/39	61/46
Air flow (h)	m ³ /h-l/s	HP	510-142	552-153	642-178
Sound pressure level (h/l)	dB(A)	HP	39/23	40/24	46/31
Sound power level (h/l)	dB(A)	HP	54/38	55/39	61/46
Dimensions (h x w x d)	mm		600 × 700 × 220	600 × 700 × 220	600 × 700 × 220
Weight	kg		16	16	16
Flare connections - Gas	inch		3/8	3/8	1/2
Flare connections - Liquid	inch		1/4	1/4	1/4
Remote controller			WH-L16SE (infra-red)	WH-L16SE (infra-red)	WH-L16SE (infra-red)

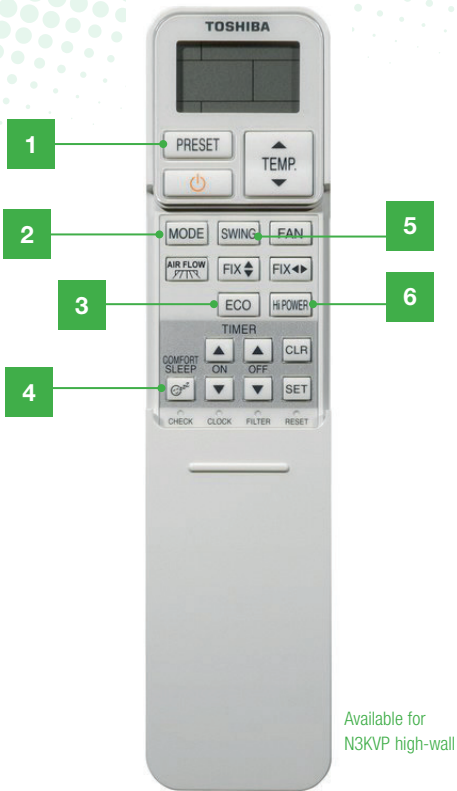

**COMPACT 4-WAY CASSETTE
SMUV**

Indoor unit			RAS-M10SMUV-E	RAS-M13SMUV-E	RAS-M16SMUV-E
Panel type			RB-B11MC(W)E	RB-B11MC(W)E	RB-B11MC(W)E
Air flow (c)	m ³ /h-l/s	CO	588-163	618-172	660-183
Sound pressure level (h/l)	dB(A)	CO	37/30	38/30	40/31
Sound power level (h/l)	dB(A)	CO	52/45	53/45	55/46
Air flow (h)	m ³ /h-l/s	HP	588-163	618-172	660-183
Sound pressure level (h/l)	dB(A)	HP	37/30	38/30	40/31
Sound power level (h/l)	dB(A)	HP	52/45	53/45	55/46
Dimensions (h x w x d) - unit	mm		268 × 575 × 575	268 × 575 × 575	268 × 575 × 575
Weight - unit	kg		15	15	15
Dimensions (h x w x d) - panel	mm		27 x 700 x 700	27 x 700 x 700	27 x 700 x 700
Weight - panel	kg		3	3	3
Flare connections - Gas	inch		3/8	3/8	1/2
Flare connections - Liquid	inch		1/4	1/4	1/4
Remote controller			WH-H3UE (infra-red)	WH-H3UE (infra-red)	WH-H3UE (infra-red)

OPTION/ACCESSORY

Part name	Model name	For use with
Wireless remote controller (with weekly timer)	RB-RXS31-E	High-wall (N3KV2) and console type
Wired remote controller	RB-RWS20-E	Ducted type

Remote controllers

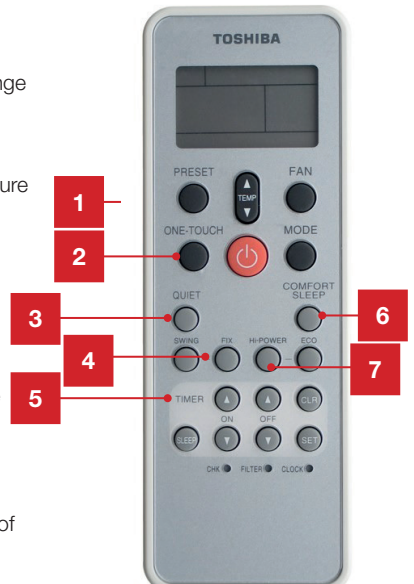


- 1 One Touch Preset**
Store your desired settings and activate them at the touch of a button.
- 2 One Touch My Comfort**
Toshiba has conducted extensive studies to assess customer behaviour in order to offer a combination of features that is perfect for you.
- 3 Eco**
Achieve energy savings of up to 25% compared with standard settings.
- 4 Comfort Sleep**
For optimum comfort, set temperature is automatically risen by 1°C after 1 hour, then another degree after 2 hours, which will be maintained until morning.
- 5 Swing and Fix Louvre**
Select your optimum air flow by selecting from a range of fixed and swing louvre positions.
- 6 Hi-Power**
Extra air flow to rapidly reach your desired temperature setting.

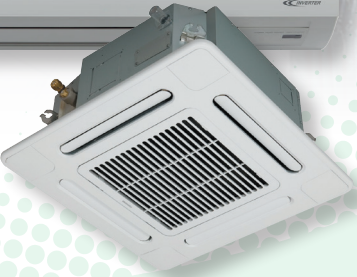


- 1 One Touch Preset**
Store your desired settings and activate them at the touch of a button.
- 2 One Touch My Comfort**
Toshiba has conducted extensive studies to assess customer behaviour in order to offer a combination of features that is perfect for you.
- 3 Eco**
Possible to automatically control room temperature to save energy (except in dry mode).
- 4 Comfort Sleep**
For optimum comfort, set temperature is automatically risen by 1°C after 1 hour, then another degree after 2 hours, which will be maintained until morning.
- 5 Swing and Fix Louvre**
Select your optimum air flow by selecting from a range of fixed and swing louvre positions.
- 6 Quiet**
Possible to operate at super low fan speed for quiet operation (except in dry mode).
- 7 Hi-Power**
Possible to automatically control room temperature and cooling or heating capacity for faster cooling or heating operation (except in dry mode).

Note: When pushing the "SWING", "FIX" and "FILTER" buttons, the indoor unit does not operate and the receiving beep sound does not occur.



- 1 One Touch Preset**
- 2 One Touch My Comfort**
- 3 Quiet**
- 4 Swing and Fix Louvre**
- 5 Timer Mode**
- 6 Comfort Sleep**
- 7 Hi-Power**





RAV Range Quality – and nothing else

The Toshiba philosophy is firmly based on product improvements and the search for innovation. This also benefits the three product ranges in the light commercial segment, not least because of the economical advantages with a quick payback period for the air conditioning system investment.

Toshiba only uses the most advanced and high-quality components and our success proves this strategy right. Toshiba has been manufacturing air conditioners in its factories in Fuji, Japan and Bangkok, Thailand since 1975. Both factories are certified to the international quality standard ISO 14001/ISO 9001. The products comply with all EU standards and this is documented by the CE mark on the nameplate.

All products are included in the Eurovent directory and this reassures the customer that the unit data measuring method is correct. Products also comply with EU Directive 2002/95/EG restricting the use of hazardous substances in electrical and electronic equipment (RoHS).

Toshiba room air conditioners exceed the ECODESIGN directive requirement that room air conditioners up to 12 kW should meet strict efficiency and sound criteria.

Put your trust in the quality of Toshiba air conditioners – from the producer up to the specialist installer.

- 100% inverter technology
- Very economical
- Refrigerant R410A
- Easy installation
- Economical cooling and heating
- Maximum reliability
- Continuous operation without limitations
- Single and multiple installations



“Commitment to the environment”: part of the corporate Toshiba philosophy

Toshiba has invested in research and development of innovative room air conditioning systems for more than 65 years and is regarded as the inventor of the inverter technology. Toshiba has always promoted environmentally responsible and ecologically compatible air conditioning solutions.

Long before it became a legal requirement Toshiba started to produce units that do not harm the environment.

SAFETY FIRST

If a system has been correctly installed it has a hermetically sealed refrigerant circuit and no harmful substances are released to the environment.

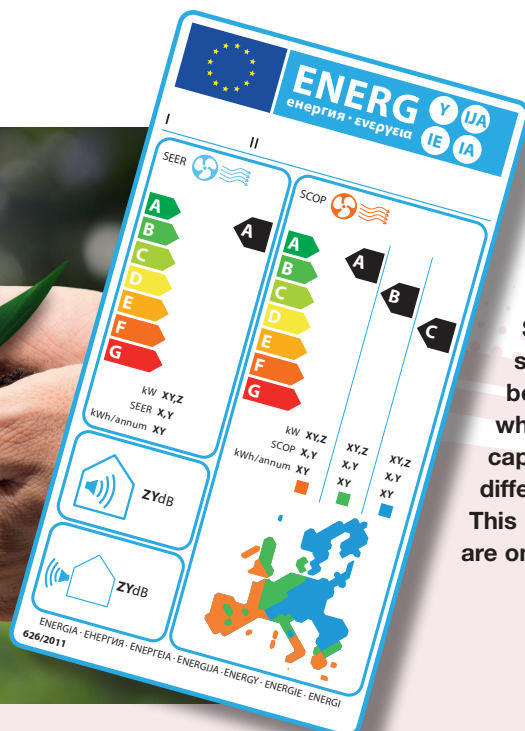
The refrigerant used is R410A, a non-ozone-depleting refrigerant with characteristics to support the efficiency of Toshiba room air conditioning systems.

Toshiba meets all criteria for the implementation of the Kyoto protocol

Since the ECODESIGN directive has come into effect, the efficiency of room air conditioners up to 12 kW capacity is indicated by the **SEER** and **SCOP** ratios. They use several defined measurement points and also consider part-load operation (used approximately 90% of overall operation). This means that efficiency is measured in a new and more realistic way.

All Toshiba room air conditioners comply with the ECODESIGN directive.

The seasonal efficiency ratios are shown on the product pages and you can find the complete documentation for Toshiba products on the website <http://ecodesign.toshiba-airconditioning.eu> or www.toshiba-aircon.co.uk.



The new energy label shows energy efficiency class, sound power level as well as the seasonal energy efficiency ratios SEER and SCOP.

Since the manufacturer can select the lowest temperature between -10°C and +2°C, at which the full heat pump heating capacity is achieved, there are different values at 100% heat load. This means that the SCOP values are only comparable up to a degree.

Cooling and heating: optimised year-round comfort from Toshiba

All Toshiba room air conditioners are designed as air-to-air heat pumps, based on the latest heat pump technology. They can be used for cooling as well as for extremely efficient heating.

The energy source used is air that is free and available without restrictions. A correctly sized and professionally installed air conditioning system also ensures pleasant room conditions during in-between seasons and during the winter months.



MAXIMUM EFFICIENCY

- High efficiency ratios by combining inverter technology and twin-rotary compressors
- Exceptionally high efficiency at part-load operation
- Low power consumption – low operating costs

MAXIMUM COMFORT

- Cooling – heating – dehumidification: all at the touch of a button and saving energy
- Individual or central control
- Simple and flexible installation – even for retrofits

CONTINUOUS OPERATION

- Perfect engineering for continuous high-efficiency operation in cooling and heating
- Ideally suitable for air conditioning of challenging sites such as mobile phone stations or server rooms

ECOLOGICALLY COMPATIBLE

- Low power consumption in cooling and heating mode due to inverter technology
- No harmful emissions or negative impact on the environment
- Air used as the energy source



MONOVALENT HEATING with air-to-air heat pumps



24-HOUR CONTINUOUS OPERATION

The Digital and Super Digital Inverter meet this challenge with flying colours!

Leading in technology

Toshiba has been investing in the development and improvement of the inverter technology for decades, and can now proudly say that all room air conditioners equipped with inverters deliver excellent efficiency ratios and work with absolute reliability and precision.

INVERTER TECHNOLOGY

Modern air conditioners no longer switch the compressor on and off to control the indoor temperature, they control capacity demands using inverter technology. This technology uses advanced electronics to modify power supply, frequency and voltage of the compressor.

Toshiba inverter technology permits infinite and loss-free control of the compressor speed. The speed is continuously adjusting the load conditions and this means that only the cooling or heating capacity actually required is provided. The setpoint temperature can be precisely maintained and energy-saving operation is guaranteed.

TWIN-ROTARY COMPRESSORS

The benefits of inverter technology are further optimised in combination with Toshiba twin-rotary compressors. These allow excellent speed control in the capacity range from 20 to 100% capacity: this is an exclusive Toshiba benefit!

The company's compressor development department launched the twin-rotary compressor many years ago. It consists of two opposed rotary pistons that excel with an enhanced efficiency ratio and extended operating life.



1 The motor – the heart of the compressor

The high-quality design of the motor includes the latest mechanical and electrical technologies. Inverter technology and conversion to direct current allow infinite control from 20 to 100% capacity.

2 Twin-rotary compressor

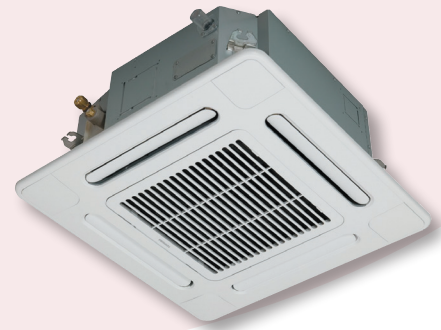
Two opposed rotary pistons guarantee high mechanical stability and minimised vibrations, contributing significantly to high efficiency ratios and an extended operating life.

3 Liquid separator

The liquid separator positioned ahead of the compressor prevents migration of liquid refrigerant to the compressor.

4 Crankshaft mounting

Special crankshaft mounting and lifting via magnets during operation ensures minimised friction losses.



TOSHIBA INVERTER

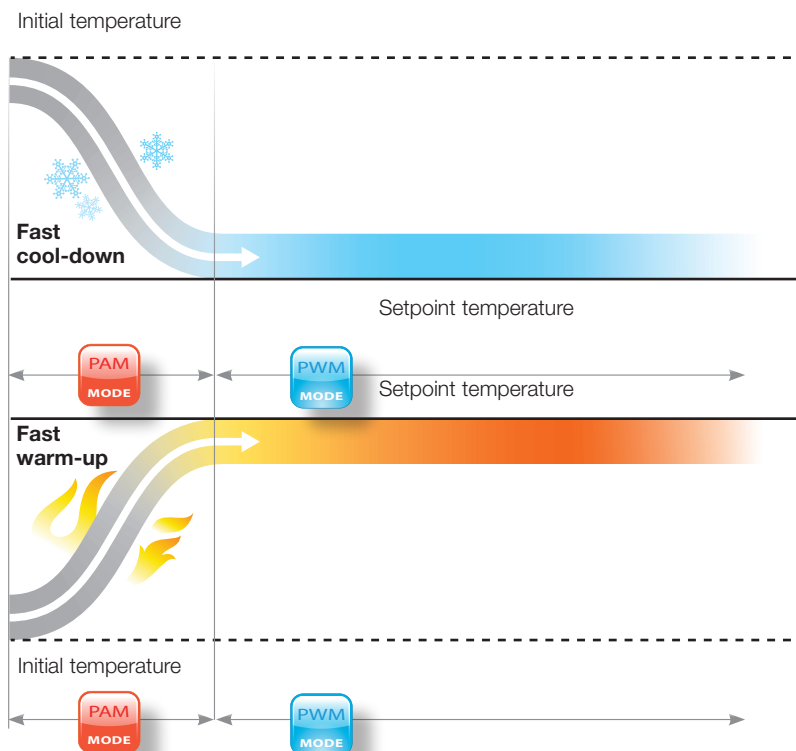
HYBRID INVERTER CONTROL

Hybrid inverter control combines two intelligent control mechanisms to reach the setpoint temperature as quickly as possible with maximum efficiency.

If the difference between setpoint and actual temperature is very high, the inverter switches to the PAM mode, quickly achieving high capacity and desired comfort. If the difference between setpoint and actual temperature is low, the inverter changes to the PWM mode.

In this mode power input is minimised, therefore maximising efficiency.

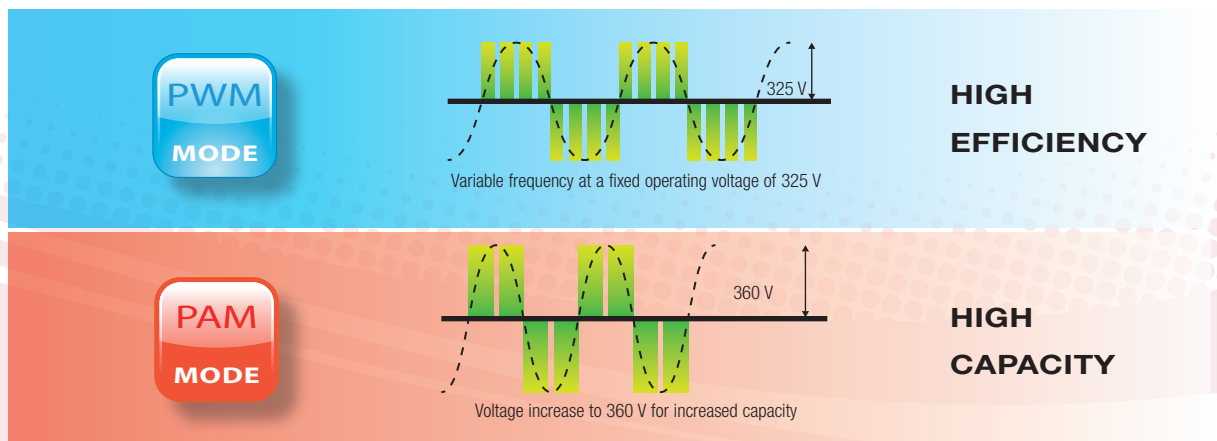
Many inverter air conditioners use at least one of these two control modes. The Toshiba DC hybrid inverter integrates both technologies in parallel and therefore offers optimised results.



At high loads (big difference between setpoint and actual indoor temperature), as for example at the start-up of an air conditioning system the inverter works in the **PAM mode** as **efficiency is highest in this mode**.

At lower loads (small difference between setpoint and actual indoor temperature) the inverter switches to the **PWM mode**. This mode has the lowest power input and that means **highest efficiency at lowest energy consumption**.

Vibration evolution



Powerful, extremely efficient and reliable

Toshiba air conditioners in the light commercial product range are exceptionally well-designed systems that meet the highest demands.

Uncompromising development has for many years guaranteed models of superior quality and above all maximum energy efficiency.

■ Optimised energy efficiency

■ Compact design

■ Year-round cooling and heating

■ Exceptional reliability

DIGITAL INVERTER

The outdoor units of the Digital Inverter range are compact and with their small dimensions ideally suitable for installations with limited space. The units are among the lightest in the marketplace and also offer an attractive price-performance ratio.



SUPER DIGITAL INVERTER

If only the best is good enough for you, you should choose the Super Digital Inverter range. These units offer excellent efficiency values, extended refrigerant line lengths and generous application limits for both heating and cooling.



DIGITAL INVERTER



Digital Inverter

Compact, light-weight and superior efficiency

Compact air conditioning solutions with an attractive price-performance ratio

- Extremely high efficiency with efficiency ratios of up to 3.9
- Exceptionally high part-load efficiency - the unit mostly operates at part load
- DC hybrid inverter technology with intelligent control in PWM or PAM mode
- Twin-rotary compressors for maximum efficiency
- Extremely light and compact design
- Single, twin and triple installations

Environmentally neutral and saving resources

- Inverter control minimises power consumption, as the unit always adapts to the current load conditions
- No particulates
- No CO₂
- Ozone-friendly R410A refrigerant
- Air as energy source in heating mode

Flexible application

- All models are designed as heat pumps and suitable for year-round operation (cooling, heating)
- Due to the compact design the units are ideal for installations with limited available space
- Low weight: The Digital Inverter is among the lightest outdoor unit in its class
- Long refrigerant lines possible (line length up to 70 m with 30 m height difference)
- Winter operation device (intelligent control of the condenser fan and crankcase heating via the motor windings)
- Temperature application range:
Cooling: -15°C to +46°C (outdoor temperature), if location is protected against wind lower outdoor temperatures are possible
Heating: -15°C to +24°C (outdoor temperature)





S U P E R
DIGITAL INVERTER



Super Digital Inverter

Cooling and heating at maximum efficiency

Focus on energy savings and highest reliability

- Maximum efficiency with top efficiency ratios of up to 4.8
- Superior part-load efficiency - the control allows top values up to a minimum speed of 10 Hz
- DC hybrid inverter technology with intelligent control in PWM or PAM mode
- Twin-rotary compressors for maximum efficiency
- Maximum reliability
- Single, twin and triple installations

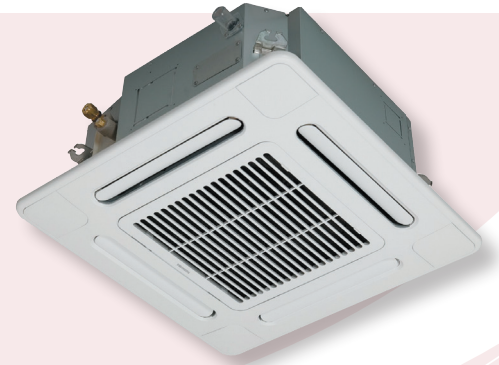
Environmentally neutral and saving resources

- Inverter control minimises power consumption, as the unit always adapts to the current load conditions
- No particulates
- No CO₂
- Ozone-friendly R410A refrigerant
- Air as energy source in heating mode

Flexible application

- All models are designed as heat pumps and suitable for year-round operation (cooling, heating) at optimised efficiency
- Long refrigerant lines possible (line length up to 75 m with 50 m height difference)
- Winter operation device (intelligent control of the condenser fan and crankcase heating via the motor windings)
- Temperature application range:
Cooling: -15°C to +43°C (outdoor temperature), if location is protected against wind lower outdoor temperatures are possible
Heating: -20°C to +15°C (outdoor temperature)





Light Commercial Indoor units

Toshiba offers a wide range of indoor units for commercial buildings and has the right unit for most applications.

Depending on building constraints and possibilities you can choose high-wall or under-ceiling units that are both easy to install. Ducted and cassette units are even more unobtrusive. They discreetly blend in with the room interior and are almost invisible as they provide comfortable conditions.

All indoor units are compatible with the outdoor units of the Digital Inverter or Super Digital Inverter range, depending on their capacity. In twin or multiple installations a combination with the BIG Digital Inverter may be beneficial.

Another important aspect to complement design, efficiency and high reliability is the control of the air conditioner. The various remote controls and modules available permit individual or central control.

All models up to 12 kW capacity comply with the ECODSIGN directive and meet all efficiency and sound requirements.





Indoor units: Overview

High-wall unit

2.5 kW to 7.1 kW cooling capacity



With easy installation and high flexibility high-wall units are suitable for a wide range of applications.

Digital Inverter, Super Digital Inverter

Under-ceiling unit

3.6 kW to 14.0 kW cooling capacity



Under-ceiling units guide the air flow along the ceiling, optimising the room climate without creating draughts.

Digital Inverter, Super Digital Inverter

4-way cassette unit

5.0 kW to 14.0 kW cooling capacity



Cassette units are fully installed above false ceilings. The conditioned air is blown into the room via four louvers, ensuring perfect air distribution.

Digital Inverter, Super Digital Inverter

600 x 600 mm compact cassette unit

2.5 kW to 5.0 kW cooling capacity

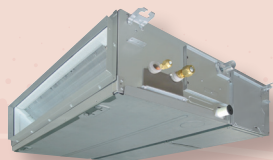


This compact cassette unit is compatible with any standard Euro ceiling module and ensures optimal air distribution in the room via four louvers.

Digital Inverter, Super Digital Inverter

Ducted unit

3.6 kW to 14.0 kW cooling capacity



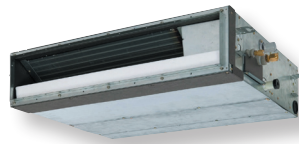
Ducted units are fully installed above false ceilings and with only the supply and return air panels visible. Several outlets ensure a consistent temperature in all areas of the room.

Digital Inverter, Super Digital Inverter



Slim ducted unit

2.5 kW to 5.3 kW cooling capacity

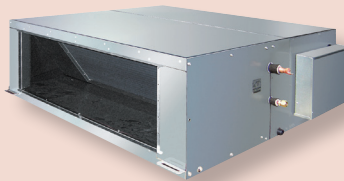


If space in the ceiling void is limited the slim ducted unit with a height of only 210 mm is ideal.

Digital Inverter, Super Digital Inverter

High-static ducted unit

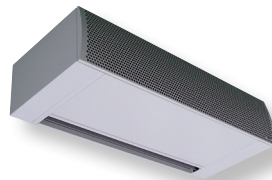
20.0 kW to 23.7 kW cooling capacity



Larger buildings usually require a higher external static pressure for air conditioning. The high-static ducted unit supplies higher static pressure and offers all the other benefits of ducted units.

Digital Inverter

Air curtain



Air curtains form a barrier of moving air blown across the door opening. This installation is recommended, if doors are left open or automatic doors are frequently opened for access.

Digital Inverter, Super Digital Inverter

Ventilation kit

4.1 kW to 27.0 kW cooling capacity

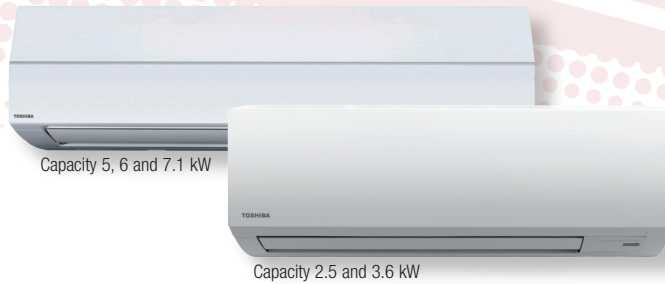


This ready to plug-in kit permits easy connection of on-site heat exchangers to all outdoor units of the Digital Inverter and Super Digital Inverter ranges.

Digital Inverter, Super Digital Inverter



High-wall units



RAV-SM307KRTP-E, RAV-SM407KRTP-E, RAV-SM566KRT-E, RAV-SM806KRT-E

Elegant design for many applications

- Compact, elegant design
- Precise temperature control in cooling and heating mode
- Quiet operation using a low-noise three-speed fan
- Large louvre for optimised air distribution in the room
- Automatic restart after a power failure
- Frost protection function allows constant room heating at 8°C in heating mode; can be activated via the remote control
- Night operation: allows extra-quiet outdoor unit operation at the touch of a button when used together with the optional standard remote control RBC-AMS54E-ES

Clean air

- Washable dust filters covering the complete heat exchanger
- Self-cleaning function: the fan continues to run for a while after the unit is switched off to ensure that the heat exchanger is completely dry and prevent the formation of mould

Individual control

- Infrared remote control (standard, included loose): Selection of mode (cooling, heating, dehumidifying, automatic) and temperature, louvre positioning or swing function, timer function, "Hi power" with increased air flow to quickly reach the setpoint temperature, "Comfort sleep" to activate the OFF timer at 1-, 3-, 6- or 9-hour intervals, "Pre-set" and "Quiet"
- Depending on the requirements the indoor units can optionally also be controlled via the wired remote control, weekly timer, central remote control, window contact and analogue control (0-10 V), operation and fault notification module as well as all available BMS systems

Further details on pages 58 and 59.



Correct louvre positioning ensures draught-free comfort

No self-cleaning function

Moisture will remain inside the unit after it has been switched off.



With self-cleaning function

The fan dries the moisture after the unit has been switched off, preventing mould formation.



Digital Inverter RAV high-wall unit
Technical data heat pump

Indoor unit			RAV-SM307KRTP-E	RAV-SM407KRTP-E	RAV-SM566KRT-E	RAV-SM806KRT-E
Outdoor unit			RAV-SM304ATP-E	RAV-SM404ATP-E	RAV-SM564ATP-E	RAV-SM804ATP-E
Cooling capacity	kW	❄️	2.50	3.60	5.00	6.70
Cooling capacity range (min.-max.)	kW	❄️	0.90-3.00	0.90-4.00	1.50-5.60	1.50-7.00
Power input	kW	❄️	0.61	1.13	1.66	2.44
Energy efficiency ratio EER		❄️	4.10	3.19	3.01	3.42
Energy efficiency ratio SEER		❄️	5.90	5.40	5.77	5.62
Pdesignc		❄️	2.50	3.60	5.00	6.70
Energy efficiency class		❄️	A+	A	A+	A+
Application range (outside temp.)	°C	❄️	-15+46	-15+46	-15+46	-15+46
Heating capacity	kW	🔥	3.40	4.00	5.30	7.70
Heating capacity range (min.-max.)	kW	🔥	0.80-4.50	0.80-5.00	1.50-6.30	1.50-9.00
Power input	kW	🔥	0.85	1.12	1.55	2.61
Energy efficiency ratio COP		🔥	4.00	3.57	3.41	2.95
Energy efficiency ratio SCOP		🔥	4.00	4.12	4.00	4.01
Pdesignh	kW	🔥	3.10	3.70	4.40	6.30
Energy efficiency class		🔥	A+	A+	A+	A+
Application range (outside temp.)	°C	🔥	-15+24	-15+24	-15+15	-15+15

Indoor unit			RAV-SM307KRTP-E	RAV-SM407KRTP-E	RAV-SM566KRT-E	RAV-SM806KRT-E
Air flow*	m³/h		570	690	840	1020
Sound pressure level**	dB(A)		41/29	45/30	42/36	47/36
Sound power level**	dB(A)		56/44	60/45	57/51	62/51
Dimensions [H × L × D]	mm		275 × 790 × 217	275 × 790 × 217	320 × 1050 × 228	320 × 1050 × 228
Weight	kg		10	10	12	12

Outdoor unit			RAV-SM304ATP-E	RAV-SM404ATP-E	RAV-SM564ATP-E	RAV-SM804ATP-E
Air flow*	m³/h		1800	2220	2400	2700
Sound pressure level	dB(A)	❄️ 🔥	46/47	49/50	46/48	48/52
Sound power level	dB(A)	❄️ 🔥	61/62	64/65	63/65	65/69
Flare connection suction line	in - mm		3/8 - 9.5	1/2 - 12.7	1/2 - 12.7	5/8 - 15.9
Flare connection liquid line	in - mm		1/4 - 6.4	1/4 - 6.4	1/4 - 6.4	3/8 - 9.5
Compressor type			Twin-rotary compressor	Twin-rotary compressor	Twin-rotary compressor	Twin-rotary compressor
Min. line length	m		2	2	5	5
Max. line length	m		20	20	30	30
Max. height difference	m		10	10	30	30
Power supply	V/ph/Hz		220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Fuse rating	A		10	10	16	16
Dimensions [H × L × D]	mm		550 × 780 × 290	550 × 780 × 290	550 × 780 × 290	550 × 780 × 290
Weight	kg		33	39	40	44

Super Digital Inverter RAV high-wall unit
Technical data heat pump

Indoor unit			RAV-SM407KRTP-E	RAV-SM566KRT-E	RAV-SM806KRT-E
Outdoor unit			RAV-SP404ATP-E	RAV-SP564ATP-E	RAV-SP804ATP-E
Cooling capacity	kW	❄️	3.60	5.00	7.10
Cooling capacity range (min.-max.)	kW	❄️	0.90-4.00	1.20-5.60	1.90-8.00
Power input	kW	❄️	1.13	1.44	2.21
Energy efficiency ratio EER		❄️	3.19	3.47	3.21
Energy efficiency ratio SEER		❄️	5.40	5.82	5.88
Pdesignc		❄️	2.50	5.00	7.10
Energy efficiency class		❄️	A	A+	A+
Application range (outside temp.)	°C	❄️	-15+46	-15+43	-15+43
Heating capacity	kW	🔥	4.00	5.60	8.00
Heating capacity range (min.-max.)	kW	🔥	0.80-5.00	0.90-7.30	1.30-10.60
Power input	kW	🔥	1.12	1.50	2.34
Energy efficiency ratio COP		🔥	3.57	3.73	3.42
Energy efficiency ratio SCOP		🔥	4.12	4.01	3.87
Pdesignh	kW	🔥	3.10	5.80	7.00
Energy efficiency class		🔥	A+	A+	A
Application range (outside temp.)	°C	🔥	-15+24	-20+15	-20+15

Indoor unit			RAV-SM407KRTP-E	RAV-SM566KRT-E	RAV-SM806KRT-E
Air flow*	m³/h		690	840	1020
Sound pressure level**	dB(A)		45/30	42/36	47/36
Sound power level**	dB(A)		60/45	57/51	62/51
Dimensions [H × L × D]	mm		275 × 790 × 217	320 × 1050 × 228	320 × 1050 × 228
Weight	kg		10	12	12

Outdoor unit			RAV-SP404ATP-E	RAV-SP564ATP-E	RAV-SP804ATP-E
Air flow*	m³/h		2400	2400	3000
Sound pressure level	dB(A)	❄️ 🔥	45/47	47/48	48/49
Sound power level	dB(A)	❄️ 🔥	62/64	63/64	64/65
Flare connection, suction-liquid line	in - mm		1/2-1/4 - 12.7-6.4	1/2-1/4 - 12.7-6.4	5/8-3/8 - 15.9-9.5
Compressor type			Twin-rotary compressor	Twin-rotary compressor	Twin-rotary compressor
Min. line length	m		5	5	5
Max. line length	m		30	50	50
Max. height difference	m		30	30	30
Power supply	V/ph/Hz		220-240/1/50	220-240/1/50	220-240/1/50
Fuse rating	A		10	16	16
Dimensions [H × L × D]	mm		550 × 780 × 290	550 × 780 × 290	890 × 900 × 320
Weight	kg		40	44	66

* At maximum fan speed

** At maximum and minimum fan speed

❄️ Cooling

🔥 Heating



Under-ceiling unit



RAV-SM408CTP-E, RAV-SM568CTP-E, RAV-SM808CTP-E, RAV-SM1108CTP-E, RAV-SM1408CTP-E, RAV-SM1608CTP-E

Comfort from above for perfect room conditions

- New, elegant design with rounded corners
- Increased efficiency thanks to new heat exchanger
- Quiet operation using a low-noise three-speed fan
- Large louvre for optimised air distribution in the room
- Automatic restart after a power failure
- Simple installation: the ceiling-mounting device is installed separately and the indoor unit is then simply hooked up
- Frost protection function allows constant room heating at 8°C in heating mode; can be activated via the remote control

Noticeable comfort

- Increased air flow (+38% compared to previous model) at reduced noise generation (-9%) due to the new air outlet design
- Wider louvre design allows improved air flow adjustment
- Enhanced fan with additional louvre for optimised air flow
- Perfect air circulation ensures efficient temperature control also in the floor area, especially in heating mode
- Night operation: allows extra-quiet outdoor unit operation at the touch of a button when used together with the optional standard remote control RBC-AMS54E-ES

Clean air

- Washable dust filters covering the complete heat exchanger
- Fresh air supply with an external fan allows up to max. 15% of the nominal indoor unit air flow
- Self-cleaning function: a special coating on the louvres ensures that dirt does not collect on the louvre and is flushed away by the condensate water. With the self-cleaning function the fan continues to run for a while after the unit is switched off to ensure that the heat exchanger is completely dry and prevent the formation of mould

Individual control

- Depending on the requirements the indoor units can optionally be controlled via the wired remote control, infrared remote control, weekly timer, central remote control, window contact and analogue control (0-10 V), operation and fault notification module as well as all available BMS systems

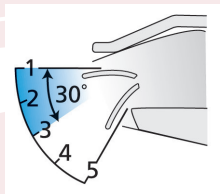
Further details on pages 58 and 59.

Accessories

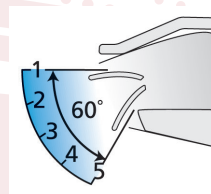
Condensate lift pump TCB-DP31CE with 600 mm lift, matching corner pieces TCB-KP13CE, TCB-KP23CE, optional control kit TCB-PCUC1E, infrared kit RBC-AX33CE



Under-ceiling units allow louvre adjustment so that the air flow is guided along the ceiling above the room occupants.



In cooling mode the louvre swing movement is infinitely variable in the upper area (between positions 1 and 3).



To ensure faster warm-up in heating mode the louvre setting is infinitely variable over the whole area (positions 1 to 5).

Digital Inverter RAV under-ceiling unit

Technical data **heat pump**

Indoor unit			RAV-SM408CTP-E	RAV-SM568CTP-E	RAV-SM808CTP-E	RAV-SM1108CTP-E*	RAV-SM1408CTP-E*	RAV-SM1608CTP-E
Outdoor unit			RAV-SM404ATP-E	RAV-SM564ATP-E	RAV-SM804ATP-E	RAV-SM1104ATP-E	RAV-SM1404ATP-E	RAV-SM1603AT-E1
Cooling capacity	kW	❄️	3.60	5.00	6.90	10.00	12.10	14.00
Cooling capacity range (min.-max.)	kW	❄️	0.90-4.00	1.50-5.60	1.50-7.40	3.00-11.20	3.00-13.20	3.00-16.00
Power input	kW	❄️	1.20	1.61	2.38	3.11	4.42	4.65
Energy efficiency ratio EER		❄️	4.34	3.11	2.90	3.22	2.74	3.01
Energy efficiency ratio SEER		❄️	5.96	5.41	5.62	5.79	-	-
Pdesignnc		❄️	3.60	5.00	6.90	10.00	-	-
Energy efficiency class		❄️	A+	A	A+	A+	-	-
Application range (outside temp.)	°C	❄️	-15+46	-15+46	-15+46	-15+46	-15+46	-15+43
Heating capacity	kW	🔥	4.00	5.30	7.70	11.20	12.80	16.00
Heating capacity range (min.-max.)	kW	🔥	0.8-5.0	1.50-6.30	1.50-9.00	3.00-12.50	3.00-16.00	3.00-18.00
Power input	kW	🔥	0.78	1.36	2.13	2.94	3.43	4.61
Energy efficiency ratio COP		🔥	5.13	3.90	3.62	3.81	3.73	3.47
Energy efficiency ratio SCOP		🔥	4.98	4.21	4.01	4.27	-	-
Pdesignnh	kW	🔥	4.00	4.70	6.80	7.60	-	-
Energy efficiency class		🔥	A++	A+	A+	A+	A	A
Application range (outside temp.)	°C	🔥	-15+24	-15+15	-15+15	-15+15	-15+15	-15+15

Indoor unit			RAV-SM408CTP-E	RAV-SM568CTP-E	RAV-SM808CTP-E	RAV-SM1108CTP-E	RAV-SM1408CTP-E	RAV-SM1608CTP-E
Air flow**	m³/h		900	900	1410	1860	2040	2040
Sound pressure level***	dB(A)		37/28	37/28	41/29	44/32	46/35	46/36
Sound power level***	dB(A)		52/43	52/43	56/44	59/47	61/50	61/51
Dimensions [H x L x D]	mm		235 x 950 x 690	235 x 950 x 690	235 x 1270 x 690	235 x 1586 x 690	235 x 1586 x 690	235 x 1586 x 690
Weight	kg		23	23	29	35	35	35

Outdoor unit			RAV-SM404ATP-E	RAV-SM564ATP-E	RAV-SM804ATP-E	RAV-SM1104ATP-E	RAV-SM1404ATP-E	RAV-SM1603AT-E1
Air flow**	m³/h		2220	2400	2700	4080	4200	6180
Sound pressure level	dB(A)	❄️ 🔥	49/50	46/48	48/52	53/54	54/55	51/53
Sound power level	dB(A)	❄️ 🔥	64/65	63/65	65/69	70/71	70/71	68/70
Flare connection suction line	in - mm		1/2 - 12.7	1/2 - 12.7	5/8 - 15.9	5/8 - 15.9	5/8 - 15.9	5/8 - 15.9
Flare connection liquid line	in - mm		1/4 - 6.4	1/4 - 6.4	3/8 - 9.5	3/8 - 9.5	3/8 - 9.5	3/8 - 9.5
Compressor type			Twin-rotary compressor					
Min. line length	m		2	5	5	5	5	5
Max. line length	m		20	30	30	50	50	50
Max. height difference	m		10	30	30	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
Fuse rating	A		10	16	16	20	32	32
Dimensions [H x L x D]	mm		550 x 780 x 290	550 x 780 x 290	550 x 780 x 290	890 x 900 x 320	890 x 900 x 320	1340 x 900 x 320
Weight	kg		39	40	44	68	68	99

Super Digital Inverter RAV under-ceiling unit

Technical data **heat pump**

Indoor unit			RAV-SM408CTP-E	RAV-SM568CTP-E	RAV-SM808CTP-E	RAV-SM1108CTP-E*	RAV-SM1408CTP-E*	RAV-SM1608CTP-E
Outdoor unit			RAV-SP404ATP-E	RAV-SP564ATP-E	RAV-SP804ATP-E	RAV-SP1104AT-E1	RAV-SP1404AT-E1	RAV-SP1604AT8-E1
Cooling capacity	kW	❄️	3.60	5.00	7.10	10.00	12.50	14.00
Cooling capacity range (min.-max.)	kW	❄️	0.90-4.00	1.20-5.60	1.90-8.00	2.60-12.00	2.60-14.00	2.60-16.00
Power input	kW	❄️	1.20	1.37	1086	2.45	3.90	4.50
Energy efficiency ratio EER		❄️	4.34	3.65	3.82	4.08	3.21	3.11
Energy efficiency ratio SEER		❄️	5.96	5.45	6.21	6.18	-	-
Pdesignnc		❄️	3.60	5.00	7.10	10.00	-	-
Energy efficiency class		❄️	A+	A	A++	A++	B	A
Application range (outside temp.)	°C	❄️	-15+46	-15+ 43	-15+43	-15+43	-15+43	-15+46
Heating capacity	kW	🔥	4.00	5.60	8.00	11.20	14.00	16.00
Heating capacity range (min.-max.)	kW	🔥	0.80-5.00	0.90-7.40	1.30-10.60	2.40-13.00	2.40-16.50	2.40-19.00
Power input	kW	🔥	0.78	1.28	1.92	2.39	3.62	4.31
Energy efficiency ratio COP		🔥	5.13	4.38	4.17	4.69	3.87	3.71
Energy efficiency ratio SCOP		🔥	4.98	4.28	4.10	4.27	-	-
Pdesignnh	kW	🔥	4.00	5.40	7.60	11.60	-	-
Energy efficiency class		🔥	A++	A+	A+	A+	A	A
Application range (outside temp.)	°C	🔥	-15+24	-20+15	-20+15	-20+15	-20+15	-20+15

Indoor unit			RAV-SM408CTP-E	RAV-SM568CTP-E	RAV-SM808CTP-E	RAV-SM1108CTP-E	RAV-SM1408CTP-E	RAV-SM1608CTP-E
Air flow**	m³/h		900	900	1410	1860	2040	2040
Sound pressure level***	dB(A)		37/28	37/28	41/29	44/32	46/35	46/36
Sound power level	dB(A)		52	52	56	59	61	61
Dimensions [H x L x D]	mm		235 x 950 x 690	235 x 950 x 690	235 x 1270 x 690	235 x 1586 x 690	235 x 1586 x 690	235 x 1586 x 690
Weight	kg		23	23	29	35	35	35

Outdoor unit			RAV-SP404ATP-E	RAV-SP564ATP-E	RAV-SP804ATP-E	RAV-SP1104AT-E1	RAV-SP1404AT-E1	RAV-SP1604AT8-E1
Air flow**	m³/h		2400	2400	3000	6060	6180	6180
Sound pressure level	dB(A)	❄️ 🔥	45/47	47/48	48/49	49/50	51/52	51/53
Sound power level	dB(A)	❄️ 🔥	62/64	63/64	64/65	66/67	68/69	68/70
Flare connection suction line	in - mm		1/2 - 12.7	1/2 - 12.7	5/8 - 15.9	5/8 - 15.9	5/8 - 15.9	5/8 - 15.9
Flare connection liquid line	in - mm		1/4 - 6.4	1/4 - 6.4	3/8 - 9.5	3/8 - 9.5	3/8 - 9.5	3/8 - 9.5
Compressor type			Twin-rotary compressor					
Min. line length	m		5	5	5	3	3	3
Max. line length	m		30	50	50	75	75	75
Max. height difference	m		30	30	30	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	380-415/3/50
Fuse rating	A		10	16	16	16	25	16
Dimensions [H x L x D]	mm		550 x 780 x 290	550 x 780 x 290	890 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320
Weight	kg		40	44	66	93	93	95

* Three-phase models also available

** At maximum fan speed

*** At maximum and minimum fan speed

❄️ Cooling

🔥 Heating



4-way cassette unit



RAV-SM564UTP-E, RAV-SM804UTP-E, RAV-SM1104UTP-E, RAV-SM1404UTP-E, RAV-SM1604UTP-E

Efficient room climate with perfect air distribution

- Attractive design with two elegant ceiling panels that allow the air to flow out directly or in a wider pattern
- Individual air flow for optimised, draught-free air distribution: 4 independently operating motors control the louvres and allow an even swing movement, intermittent swing (heating mode) and intermittent circular swing (cooling mode)
- Easy ceiling installation thanks to the low unit height of only 256 or 319 mm
- Automatic restart after a power failure
- Built-in condensate lift pump with 850 mm lift
- Frost protection function allows constant room heating at 8°C in heating mode; can be activated via the remote control
- RBC-U31PGP(W)-E - Panel for wide air flow

Noticeable comfort

- Quiet operation due to the low-noise three-speed axial turbo fan; only 28 dB(A) for the 5 and 7 kW models
- Precise temperature control
- Ceiling panel can be easily removed and cleaned
- Night operation: allows extra-quiet outdoor unit operation at the touch of a button when used together with the optional standard remote control RBC-AMS54E-ES

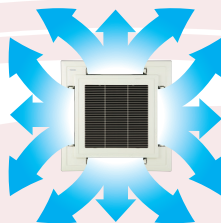
Clean air

- Washable dust filters covering the complete heat exchanger
- Fresh air supply with an external fan allows up to max. 15% of the nominal indoor unit air flow
- Self-cleaning function: the fan continues to run for a while after the unit is switched off to ensure that the heat exchanger is completely dry and prevent the formation of mould
- An Ag+ ion capsule in the condensate tank prevents unpleasant smells

Individual control

- Depending on the requirements the indoor units can optionally be controlled via the wired remote control, infrared remote control, weekly timer, central remote control, window contact and analogue control (0-10 V), operation and fault notification module as well as all available BMS systems

Further details on pages 58 and 59.



Panel RBC-U31PGP(W)-E
The special louvre shape ensures perfect air distribution in a 360° radius. This is an exclusive Toshiba feature!

Digital Inverter RAV 4-way cassette
Technical data heat pump

Indoor unit			RAV-SM564UTP-E	RAV-SM804UTP-E	RAV-SM1104UTP-E*	RAV-SM1404UTP-E*	RAV-SM1604UTP-E
Outdoor unit			RAV-SM564ATP-E	RAV-SM804ATP-E	RAV-SM1104ATP-E	RAV-SM1404ATP-E	RAV-SM1603AT-E
Cooling capacity	kW	❄️	5.00	6.70	10.00	12.00	14.00
Cooling capacity range (min.-max.)	kW	❄️	1.50-5.60	1.50-8.00	3.00-11.20	3.00-13.20	3.00-16.00
Power input	kW	❄️	1.56	2.22	3.02	3.57	4.49
Energy efficiency ratio EER		❄️	3.21	3.02	3.31	2.80	3.12
Energy efficiency ratio SEER		❄️	6.14	5.81	5.87	5.36	5.47
Pdesignc		❄️	5.00	6.70	10.00	12.00	-
Energy efficiency class		❄️	A++	A+	A+	A	A
Application range (outside temp.)	°C	❄️	-15+46	-15+46	-15+46	-15+46	-15+43
Heating capacity	kW	🔥	5.30	7.70	11.20	12.80	16.00
Heating capacity range (min.-max.)	kW	🔥	1.50-6.30	1.50-9.00	3.00-13.00	3.00-16.00	3.00-18.00
Power input	kW	🔥	1.36	2.13	2.93	3.40	4.43
Energy efficiency ratio COP		🔥	3.90	3.62	3.82	3.76	3.61
Energy efficiency ratio SCOP		🔥	4.51	4.05	4.28	4.19	4.47
Pdesignh	kW	🔥	4.70	6.80	8.00	8.00	-
Energy efficiency class		🔥	A+	A+	A+	A+	A
Application range (outside temp.)	°C	🔥	-15+15	-15+15	-15+15	-15+15	-15+15

Indoor unit			RAV-SM564UTP-E	RAV-SM804UTP-E	RAV-SM1104UTP-E	RAV-SM1404UTP-E	RAV-SM1604UTP-E
Air flow**	m³/h		1050	1230	2010	2100	2130
Sound pressure level***	dB(A)		32/28	35/28	43/33	44/34	45/36
Sound power level***	dB(A)		47/43	50/43	58/48	59/49	60/51
Dimensions [H x L x D]	mm		256 x 840 x 840	256 x 840 x 840	319 x 840 x 840	319 x 840 x 840	319 x 840 x 840
Weight	kg		20 + 4.2	20 + 4.2	24 + 4.2	24 + 4.2	24 + 4.2

Outdoor unit			RAV-SM564ATP-E	RAV-SM804ATP-E	RAV-SM1104ATP-E	RAV-SM1404ATP-E	RAV-SM1603AT-E
Air flow**	m³/h		2220	2700	4080	4200	6180
Sound pressure level	dB(A)	❄️ 🔥	49/50	48/52	53/54	54/55	51/53
Sound power level	dB(A)	❄️ 🔥	64/65	65/69	70/71	70/71	68/70
Flare connection suction line	in - mm		1/2 - 12.7	5/8 - 15.9	5/8 - 15.9	5/8 - 15.9	5/8 - 15.9
Flare connection liquid line	in - mm		1/4 - 6.4	3/8 - 9.5	3/8 - 9.5	3/8 - 9.5	3/8 - 9.5
Compressor type			Twin-rotary compressor				
Min. line length	m		2	5	5	5	5
Max. line length	m		20	30	50	50	50
Max. height difference	m		30	30	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
Fuse rating	A		10	16	20	32	32
Dimensions [H x L x D]	mm		550 x 780 x 290	550 x 780 x 290	890 x 900 x 320	890 x 900 x 320	1340 x 900 x 320
Weight	kg		39	44	68	68	99

Super Digital Inverter RAV 4-way cassette
Technical data heat pump

Indoor unit			RAV-SM564UTP-E	RAV-SM804UTP-E	RAV-SM1104UTP-E*	RAV-SM1404UTP-E*	RAV-SM1604UTP-E
Outdoor unit			RAV-SP564ATP-E	RAV-SP804ATP-E	RAV-SP1104AT-E	RAV-SP1404AT-E	RAV-SP1604AT8-E
Cooling capacity	kW	❄️	5.30	7.10	10.00	12.50	14.00
Cooling capacity range (min.-max.)	kW	❄️	1.20-5.60	1.90-8.00	2.60-12.00	2.60-14.00	2.60-16.00
Power input	kW	❄️	1.47	1.86	2.21	3.16	4.49
Energy efficiency ratio EER		❄️	3.61	3.82	4.52	3.96	3.12
Energy efficiency ratio SEER		❄️	6.17	6.39	6.60	-	-
Pdesignc		❄️	5.30	7.10	10.00	-	-
Energy efficiency class		❄️	A++	A++	A++	-	-
Application range (outside temp.)	°C	❄️	-15 +43	-15 +43	-15 +43	-15 +43	-15 +46
Heating capacity	kW	🔥	5.60	8.00	11.20	14.00	16.00
Heating capacity range (min.-max.)	kW	🔥	0.90-8.10	1.30-11.30	2.40-13.00	2.40-16.50	2.40-19.00
Power input	kW	🔥	1.21	1.91	2.34	3.21	4.30
Energy efficiency ratio COP		🔥	4.63	4.19	4.79	4.47	3.72
Energy efficiency ratio SCOP		🔥	4.58	4.19	4.28	-	-
Pdesignh	kW	🔥	5.40	7.60	11.60	-	-
Energy efficiency class		🔥	A+	A+	A+	-	-
Application range (outside temp.)	°C	🔥	-20+15	-20+15	-20+15	-20+15	-20+15

Indoor unit			RAV-SM564UTP-E	RAV-SM804UTP-E	RAV-SM1104UTP-E	RAV-SM1404UTP-E	RAV-SM1604UTP-E
Air flow*	m³/h		1050	1230	2010	2100	2130
Sound pressure level**	dB(A)		32/28	35/28	43/33	44/34	45/36
Sound power level	dB(A)		47	50	58	59	60
Dimensions [H x L x D]	mm		256 x 840 x 840	256 x 840 x 840	319 x 840 x 840	319 x 840 x 840	319 x 840 x 840
Weight	kg		20 + 4.2	20 + 4.2	24 + 4.2	24 + 4.2	24 + 4.2

Outdoor unit			RAV-SP564ATP-E	RAV-SP804ATP-E	RAV-SP1104AT-E	RAV-SP1404AT-E	RAV-SP1604AT8-E
Air flow*	m³/h		2400	3000	6060	6180	6180
Sound pressure level	dB(A)	❄️ 🔥	47/48	48/49	49/50	51/52	51/53
Sound power level	dB(A)	❄️ 🔥	63/64	64/65	66/67	68/69	68/70
Flare connection suction line	in - mm		1/2 - 12.7	5/8 - 15.9	5/8 - 15.9	5/8 - 15.9	5/8 - 15.9
Flare connection liquid line	in - mm		1/4 - 6.4	3/8 - 9.5	3/8 - 9.5	3/8 - 9.5	3/8 - 9.5
Compressor type			Twin-rotary compressor				
Min. line length	m		5	5	3	3	3
Max. line length	m		50	50	75	75	75
Max. height difference	m		30	30	30	30	30
Power supply	V/ph/Hz		220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	380-415/3/50
Fuse rating	A		16	16	16	25	16
Dimensions [H x L x D]	mm		550 x 780 x 290	890 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320
Weight	kg		44	66	93	93	95

* Three-phase models also available

** At maximum fan speed

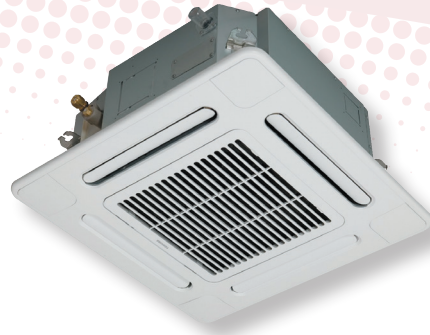
*** At maximum and minimum fan speed

❄️ Cooling

🔥 Heating



600 x 600 mm 4-way compact cassette unit



RAV-SM304MUT-E, RAV-SM404MUT-E, RAV-SM564MUT-E

The perfect solution for all standard Euro ceiling modules

- Modern, elegant design with four air outlets for optimal ceiling installation
- Compact dimensions: 575 x 575 mm
- Low unit height of only 268 mm
- Automatic restart after a power failure
- Built-in condensate lift pump with 850 mm lift
- Frost protection function allows constant room heating at 8°C in heating mode; can be activated via the remote control

Noticeable comfort

- Quiet operation due to the low-noise three-speed axial turbo fan
- Optimised air distribution via four louvres. Up to two louvres can be closed
- Louvre design prevents dust collection
- Precise temperature control
- Ceiling panel can be easily removed and cleaned
- Panel - RBC-UM11PG(W)-E
- Night operation: allows extra-quiet outdoor unit operation at the touch of a button when used together with the optional standard remote control RBC-AMS54E-ES

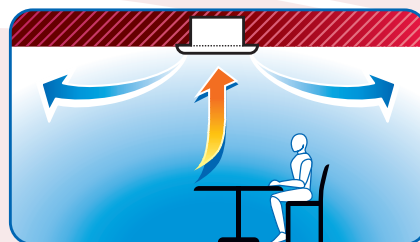
Clean air

- Washable dust filters covering the complete heat exchanger
- Fresh air supply with an external fan allows up to max. 15% of the nominal indoor unit air flow
- Self-cleaning function: the fan continues to run for a while after the unit is switched off to ensure that the heat exchanger is completely dry and prevent the formation of mould

Individual control

- Depending on the requirements the indoor units can optionally be controlled via the wired remote control, infrared remote control, weekly timer, central remote control, window contact and analogue control (0-10 V), operation and fault notification module as well as all available BMS systems

Further details on pages 58 and 59.



Digital Inverter RAV 600 x 600 mm compact cassette
Technical data heat pump

Indoor unit			RAV-SM304MUT-E	RAV-SM404MUT-E	RAV-SM564MUT-E
Outdoor unit			RAV-SM304ATP-E	RAV-SM404ATP-E	RAV-SM564ATP-E
Cooling capacity	kW	❄️	2.50	3.60	5.00
Cooling capacity range (min.-max.)	kW	❄️	0.90-3.00	0.90-4.00	1.50-5.60
Power input	kW	❄️	0.59	0.90	1.65
Energy efficiency ratio EER		❄️	4.24	4.00	3.03
Energy efficiency ratio SEER		❄️	5.53	5.35	5.48
Pdesignc		❄️	2.50	3.60	5.00
Energy efficiency class		❄️	A+	A	A
Application range (outside temp.)	°C	❄️	-15+46	-15+46	-15+46
Heating capacity	kW	🔥	3.40	4.00	5.30
Heating capacity range (min.-max.)	kW	🔥	0.80-4.50	0.80-5.00	1.50-6.30
Power input	kW	🔥	0.76	0.95	1.52
Energy efficiency ratio COP		🔥	4.47	4.21	3.49
Energy efficiency ratio SCOP		🔥	4.27	4.27	4.16
Pdesignh	kW	🔥	3.10	3.70	4.40
Energy efficiency class		🔥	A+	A+	A+
Application range (outside temp.)	°C	🔥	-15+24	-15+24	-15+15

Indoor unit			RAV-SM304MUT-E	RAV-SM404MUT-E	RAV-SM564MUT-E
Air flow*	m³/h		640	660	798
Sound pressure level**	dB(A)		40/31	40/31	43/34
Sound power level**	dB(A)		55/46	55/46	58/49
Dimensions [H x L x D]	mm		268 x 575 x 575	268 x 575 x 575	268 x 575 x 575
Weight	kg		16 + 3	16 + 3	17 + 3

Outdoor unit			RAV-SM304ATP-E	RAV-SM404ATP-E	RAV-SM564ATP-E
Air flow*	m³/h		1800	2220	2400
Sound pressure level	dB(A)	❄️ 🔥	46/47	49/50	47/48
Sound power level	dB(A)	❄️ 🔥	61/62	64/65	64/65
Flare connection suction line	in - mm		3/8 - 9.5	1/2 - 12.7	1/2 - 12.7
Flare connection liquid line	in - mm		1/4 - 6.4	1/4 - 6.4	1/4 - 6.4
Compressor type				Twin-rotary compressor	
Min. line length	m		2	2	5
Max. line length	m		20	20	30
Max. height difference	m		10	10	30
Power supply	V/ph/Hz		220-240/1/50	220-240/1/50	220-240/1/50
Fuse rating	A		10	1-	16
Dimensions [H x L x D]	mm		550 x 780 x 290	550 x 780 x 290	550 x 780 x 290
Weight	kg		33	39	40

Super Digital Inverter RAV 600 x 600 mm compact cassette
Technical data heat pump

Indoor unit			RAV-SM404MUT-E	RAV-SM564MUT-E
Outdoor unit			RAV-SP404ATP-E	RAV-SP564ATP-E
Cooling capacity	kW	❄️	3.60	4.00
Cooling capacity range (min.-max.)	kW	❄️	1.50-4.00	1.20-5.60
Power input	kW	❄️	1.00	1.56
Energy efficiency ratio EER		❄️	3.60	3.21
Energy efficiency ratio SEER		❄️	5.38	5.61
Pdesignc		❄️	3.60	5.00
Energy efficiency class		❄️	A	A+
Application range (outside temp.)	°C	❄️	-15+43	-15+43
Heating capacity	kW	🔥	4.00	4.50
Heating capacity range (min.-max.)	kW	🔥	1.50-5.00	0.90-7.40
Power input	kW	🔥	0.97	1.54
Energy efficiency ratio COP		🔥	4.12	3.64
Energy efficiency ratio SCOP		🔥	4.17	4.20
Pdesignh	kW	🔥	4.40	5.40
Energy efficiency class		🔥	A+	A+
Application range (outside temp.)	°C	🔥	-15+15	-15+15

Indoor unit			RAV-SM404MUT-E	RAV-SM564MUT-E
Air flow*	m³/h		660	798
Sound pressure level**	dB(A)		40/31	43/34
Sound power level	dB(A)		55	58
Dimensions [H x L x D]	mm		268 x 575 x 575	268 x 575 x 575
Weight	kg		17 + 3	17 + 3

Outdoor unit			RAV-SP404ATP-E	RAV-SP564ATP-E	
Air flow*	m³/h		2400	2400	
Sound pressure level	dB(A)	❄️ 🔥	45/47	47/48	
Sound power level	dB(A)	❄️ 🔥	62/64	63/64	
Flare connection suction line	in - mm		1/2 - 12.7	1/2 - 12.7	
Flare connection liquid line	in - mm		1/4 - 6.4	1/4 - 6.4	
Compressor type				Twin-rotary compressor	
Min. line length	m		5	5	
Max. line length	m		30	50	
Max. height difference	m		30	30	
Power supply	V/ph/Hz		220-240/1/50	220-240/1/50	
Fuse rating	A		10	16	
Dimensions [H x L x D]	mm		550 x 780 x 290	550 x 780 x 290	
Weight	kg		40	44	

* At maximum fan speed

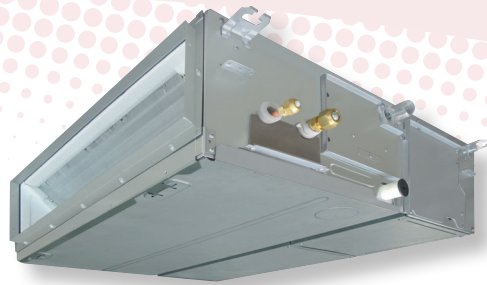
** At maximum and minimum fan speed

❄️ Cooling

🔥 Heating



Ducted unit



RAV-SM406BTP-E, RAV-SM566BTP-E1, RAV-SM806BTP-E1, RAV-SM1106BTP-E1, RAV-SM1406BTP-E, RAV-SM1606BTP-E

Ducted units for invisible comfort conditions

- Discreet installation in suspended ceilings for enhanced room aesthetics
- Low unit height of only 275 mm
- Combination with a ventilation unit possible – in this case the air conditioner should ideally control the ventilation
- Automatic restart after a power failure
- Built-in condensate lift pump with 850 mm lift
- Frost protection function allows constant room heating at 8°C in heating mode; can be activated via the remote control

Noticeable comfort

- Perfect air distribution via several air outlets to ensure even temperature conditions in all parts of the room
- The static pressure of 40 Pa (standard) can be increased to 120 Pa
- Quiet operation due to the low-noise three-speed fan
- Precise temperature control
- Night operation: allows extra-quiet outdoor unit operation at the touch of a button when used together with the optional standard remote control RBC-AMS54E-ES

Clean air

- Washable dust filters for the air intake from below
- Fresh air supply possible with an external fan (pre-punched opening \varnothing 125 mm)
- Self-cleaning function: the fan continues to run for a while after the unit is switched off to ensure that the heat exchanger is completely dry and prevent the formation of mould

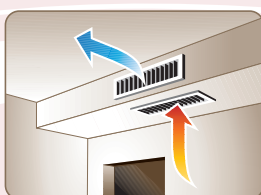
Individual control

- Depending on the requirements the indoor units can optionally be controlled via the wired remote control, infrared remote control, weekly timer, central remote control, window contact and analogue control (0-10 V), operation and fault notification module as well as all available BMS systems

Further details on pages 58 and 59.



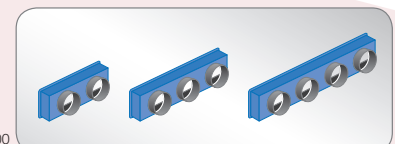
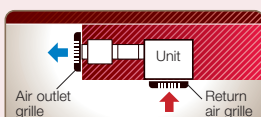
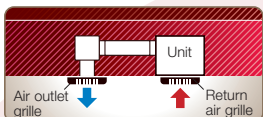
If a suspended ceiling exists, the room air is taken into the air conditioner from below, conditioned and then returned to the room via air ducts and a diffuser.



If there is no suspended ceiling a lowered ceiling on only one side of the room can achieve almost invisible air conditioning.

An optional connection flange for RAV ducted units is available in three sizes:

- TCB-SF56C6BPE
- TCB-SF80C6BPE
- TCB-SF160C6BPE



\varnothing 200

Digital Inverter RAV ducted unit
Technical data heat pump

Indoor unit			RAV-SM406BTP-E	RAV-SM566BTP-E1	RAV-SM806BTP-E1	RAV-SM1106BTP-E1*	RAV-SM1406BTP-E*	RAV-SM1606BTP-E
Outdoor unit			RAV-SM404ATP-E	RAV-SM564ATP-E	RAV-SM804ATP-E	RAV-SM1104ATP-E	RAV-SM1404ATP-E	RAV-SM1603AT-E
Cooling capacity	kW	❄️	3.60	5.00	6.70	10.00	12.10	14.00
Cooling capacity range (min.-max.)	kW	❄️	1.50-4.00	1.50-5.60	1.50-7.40	3.00-11.20	3.00-13.20	3.00-16.00
Power input	kW	❄️	1.07	1.83	2.38	3.14	4.42	5.13
Energy efficiency ratio EER		❄️	3.38	2.73	2.82	3.18	2.74	2.73
Energy efficiency ratio SEER		❄️	5.10	5.10	5.10	5.10	-	-
Pdesignc		❄️	3.60	5.00	6.70	10.00	-	-
Energy efficiency class		❄️	A	A	A	A	-	-
Application range (outside temp.)	°C	❄️	-15+46	-15+46	-15+46	-15+46	-15+46	-15+43
Heating capacity	kW	🔥	4.00	5.30	7.70	11.20	12.80	16.00
Heating capacity range (min.-max.)	kW	🔥	1.50-5.00	1.50-6.30	1.50-9.00	3.00-12.50	3.00-16.00	3.00-18.00
Power input	kW	🔥	4.40	4.40	6.70	7.60	3.55	4.69
Energy efficiency ratio COP		🔥	3.84	3.27	3.32	3.75	3.61	3.41
Energy efficiency ratio SCOP		🔥	4.02	3.98	3.83	4.14	-	-
Pdesignh	kW	🔥	4.40	4.40	6.70	7.60	-	-
Energy efficiency class		🔥	A+	A	A	A+	-	-
Application range (outside temp.)	°C	🔥	-15+24	-15+15	-15+15	-15+15	-15+15	-15+15

Indoor unit			RAV-SM406BTP-E	RAV-SM566BTP-E1	RAV-SM806BTP-E1	RAV-SM1106BTP-E1	RAV-SM1406BTP-E	RAV-SM1606BTP-E
Air flow*	m³/h		798	798	1200	2100	2100	2100
Max. external pressure	Pa		120	120	120	120	120	120
Sound pressure level**	dB(A)		33/25	33/25	34/26	40/33	40/33	40/33
Sound power level**	dB(A)		48/40	48/40	49/41	55/48	55/48	55/48
Dimensions [H × L × D]	mm		275 × 700 × 750	275 × 700 × 750	275 × 1000 × 750	275 × 1400 × 750	275 × 1400 × 750	275 × 1400 × 750
Weight	kg		23	23	30	40	40	40

Outdoor unit			RAV-SM404ATP-E	RAV-SM564ATP-E	RAV-SM804ATP-E	RAV-SM1104ATP-E	RAV-SM1404ATP-E	RAV-SM1603AT-E1
Air flow*	m³/h		2220	2400	2700	4080	4200	6180
Sound pressure level	dB(A)	❄️ 🔥	49/50	46/48	48/52	53/54	54/55	51/53
Sound power level	dB(A)	❄️ 🔥	64/65	63/65	65/69	70/71	70/71	68/70
Flare connection suction line	in - mm		1/2 - 12.7	1/2 - 12.7	5/8 - 15.9	5/8 - 15.9	5/8 - 15.9	5/8 - 15.9
Flare connection liquid line	in - mm		1/4 - 6.4	1/4 - 6.4	3/8 - 9.5	3/8 - 9.5	3/8 - 9.5	3/8 - 9.5
Compressor type			Twin-rotary compressor					
Min. line length	m		2	5	5	5	5	5
Max. line length	m		20	30	30	50	50	50
Max. height difference	m		10	30	30	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
Fuse rating	A		10	16	16	20	32	32
Dimensions [H × L × D]	mm		550 × 780 × 290	550 × 780 × 290	550 × 780 × 290	890 × 900 × 320	890 × 900 × 320	1340 × 900 × 320
Weight	kg		39	40	44	68	68	99

Super Digital Inverter RAV ducted unit
Technical data heat pump

Indoor unit			RAV-SM406BTP-E	RAV-SM566BTP-E1	RAV-SM806BTP-E	RAV-SM1106BTP-E1*	RAV-SM1406BTP-E*	RAV-SM1606BTP-E
Outdoor unit			RAV-SP404ATP-E	RAV-SP564ATP-E	RAV-SP804ATP-E	RAV-SP1104AT-E1	RAV-SP1404AT-E1	RAV-SP1604AT8-E1
Cooling capacity	kW	❄️	3.60	5.00	7.10	10.00	12.50	14.00
Cooling capacity range (min.-max.)	kW	❄️	1.50-4.00	1.20-5.60	1.90-8.00	2.60-12.00	2.60-14.00	2.60-16.00
Power input	kW	❄️	1.07	1.56	2.06	2.64	3.83	4.65
Energy efficiency ratio EER		❄️	3.38	3.21	3.45	3.79	3.26	3.01
Energy efficiency ratio SEER		❄️	5.10	4.88	5.88	5.65	-	-
Pdesignc		❄️	3.60	5.00	7.10	10.00	-	-
Energy efficiency class		❄️	A	B	A+	A+	-	-
Application range (outside temp.)	°C	❄️	-15+43	-15+43	-15+43	-15+43	-15+43	-15+46
Heating capacity	kW	🔥	4.00	5.60	8.00	11.20	14.00	16.00
Heating capacity range (min.-max.)	kW	🔥	1.50-5.00	0.90-7.40	1.30-10.60	2.40-13.00	2.40-16.50	2.40-19.00
Power input	kW	🔥	1.04	1.55	2.21	2.77	3.83	4.65
Energy efficiency ratio COP		🔥	3.84	3.61	3.62	4.04	3.81	3.48
Energy efficiency ratio SCOP		🔥	4.02	4.01	4.00	3.87	-	-
Pdesignh	kW	🔥	4.40	5.40	7.60	10.80	-	-
Energy efficiency class		🔥	A+	A+	A	A	-	-
Application range (outside temp.)	°C	🔥	-15+15	-15+15	-15+15	-15+15	-20+15	-20+15

Indoor unit			RAV-SM406BTP-E	RAV-SM566BTP-E	RAV-SM806BTP-E	RAV-SM1106BTP-E	RAV-SM1406BTP-E	RAV-SM1606BTP-E
Air flow*	m³/h		798	798	1200	2100	2100	2100
Max. external pressure	Pa		120	120	120	120	120	120
Sound pressure level**	dB(A)		33/25	33/25	34/26	40/33	40/33	40/33
Sound power level**	dB(A)		48/40	48/40	49/41	55/48	55/48	55/48
Dimensions [H × L × D]	mm		275 × 700 × 750	275 × 700 × 750	275 × 1000 × 750	275 × 1400 × 750	275 × 1400 × 750	275 × 1400 × 750
Weight	kg		23	23	30	40	40	40

Outdoor unit			RAV-SP404ATP-E	RAV-SP564ATP-E	RAV-SP804ATP-E	RAV-SP1104AT-E1	RAV-SP1404AT-E1	RAV-SP1604AT8-E1
Air flow*	m³/h		2400	2400	3000	6060	6180	6180
Sound pressure level	dB(A)	❄️ 🔥	45/47	47/48	48/49	49/50	51/52	51/53
Sound power level	dB(A)	❄️ 🔥	62/64	63/64	64/65	66/67	68/69	68/70
Flare connection suction line	in - mm		1/2 - 12.7	1/2 - 12.7	5/8 - 15.9	5/8 - 15.9	5/8 - 15.9	5/8 - 15.9
Flare connection liquid line	in - mm		1/4 - 6.4	1/4 - 6.4	3/8 - 9.5	3/8 - 9.5	3/8 - 9.5	3/8 - 9.5
Compressor type			Twin-rotary compressor					
Min. line length	m		5	5	5	3	3	3
Max. line length	m		30	50	50	75	75	75
Max. height difference	m		30	30	30	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	380-415/3/50
Fuse rating	A		10	16	16	16	25	16
Dimensions [H × L × D]	mm		550 × 780 × 290	550 × 780 × 290	890 × 900 × 320	1340 × 900 × 320	1340 × 900 × 320	1340 × 900 × 320
Weight	kg		40	44	66	93	93	95

* Three-phase models also available

** At maximum fan speed

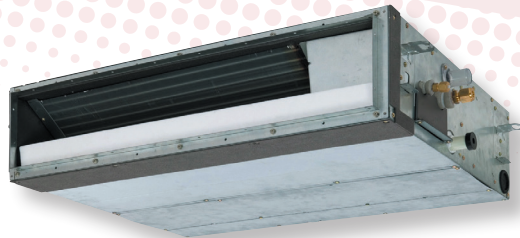
*** At maximum and minimum fan speed

❄️ Cooling

🔥 Heating



Slim ducted unit



RAV-SM304SDT-E, RAV-SM404SDT-E, RAV-SM564SDT-E

Optimal solution for installations with limited space

- Slim ducted unit with a height of only 210 mm
- Discreet installation in a suspended ceiling for enhanced aesthetics
- Maximum energy efficiency
- Automatic restart after a power failure
- Built-in condensate lift pump with 850 mm lift
- Frost protection function allows constant room heating at 8°C in heating mode; can be activated via the remote control

Noticeable comfort

- Perfect air distribution via several air outlets to ensure even temperature conditions in all parts of the room
- Pressure up to 44 Pa (4 steps: 5/15/30/44 Pa)
- Quiet operation due to the low-noise three-speed fan
- Precise temperature control
- Night operation: allows extra-quiet outdoor unit operation at the touch of a button when used together with the optional standard remote control RBC-AMS54E-ES

Clean air

- Washable dust filters for air intake from behind (modifiable to air intake from below)
- Fresh air supply possible with an external fan
- Self-cleaning function: the fan continues to run for a while after the unit is switched off to ensure that the heat exchanger is completely dry and prevent the formation of mould

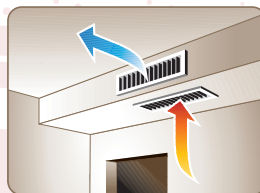
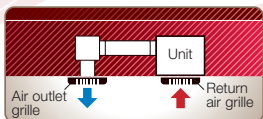
Individual control

- Depending on the requirements the indoor units can optionally be controlled via the wired remote control, infrared remote control, weekly timer, central remote control, window contact and analogue control (0-10 V), operation and fault notification module as well as all available BMS systems

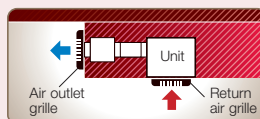
Further details on pages 58 and 59.



If a suspended ceiling exists, the room air is taken into the air conditioner from below, conditioned and then returned to the room via air ducts and a diffuser.



If there is no suspended ceiling a lowered ceiling on only one side of the room can achieve almost invisible air conditioning.



Digital Inverter RAV slim ducted unit
Technical data heat pump

Indoor unit			RAV-SM304SDT-E	RAV-SM404SDT-E	RAV-SM564SDT-E
Outdoor unit			RAV-SM304ATP-E	RAV-SM404ATP-E	RAV-SM564ATP-E
Cooling capacity	kW	❄️	2.50	3.60	5.00
Cooling capacity range (min.-max.)	kW	❄️	0.90-3.00	0.90-4.00	1.50-5.60
Power input	kW	❄️	0.56	0.93	1.91
Energy efficiency ratio EER		❄️	4.46	3.87	2.62
Energy efficiency ratio SEER		❄️	6.10	5.55	5.06
Pdesignc		❄️	2.50	3.60	5.00
Energy efficiency class		❄️	A++	A	B
Application range (outside temp.)	°C	❄️	-15+46	-15+46	-15+46
Heating capacity	kW	🔥	3.40	4.00	5.30
Heating capacity range (min.-max.)	kW	🔥	0.80-4.50	0.80-5.00	1.50-6.30
Power input	kW	🔥	0.86	0.97	1.50
Energy efficiency ratio COP		🔥	3.95	4.12	3.53
Energy efficiency ratio SCOP		🔥	4.48	3.88	4.06
Pdesignh	kW	🔥	2.90	3.70	4.40
Energy efficiency class		🔥	A+	A	A+
Application range (outside temp.)	°C	🔥	-15+24	-15+24	-15+15

Indoor unit			RAV-SM304SDT-E	RAV-SM404SDT-E	RAV-SM564SDT-E
Air flow*	m³/h		660	690	780
Max. external pressure	Pa		50	50	50
Sound pressure level**	dB(A)		39/33	39/33	45/36
Sound power level**	dB(A)		54/48	54/48	60/51
Dimensions [H x L x D]	mm		210 x 845 x 645	210 x 845 x 645	210 x 845 x 645
Weight	kg		22	22	22

Outdoor unit			RAV-SM304ATP-E	RAV-SM404ATP-E	RAV-SM564ATP-E
Air flow*	m³/h		1800	2220	2400
Sound pressure level	dB(A)	❄️ 🔥	46/47	49/50	46/48
Sound power level	dB(A)	❄️ 🔥	61/62	64/65	63/65
Flare connection suction line	in - mm		3/8 - 9.5	1/2 - 12.7	1/2 - 12.7
Flare connection liquid line	in - mm		1/4 - 6.4	1/4 - 6.4	1/4 - 6.4
Compressor type			Twin-rotary compressor	Twin-rotary compressor	Twin-rotary compressor
Min. line length	m		2	2	5
Max. line length	m		20	20	30
Max. height difference	m		10	10	30
Power supply	V/ph/Hz		220-240/1/50	220-240/1/50	220-240/1/50
Fuse rating	A		10	10	16
Dimensions [H x L x D]	mm		550 x 780 x 290	550 x 780 x 290	550 x 780 x 290
Weight	kg		33	39	40

Super Digital Inverter RAV slim ducted unit
Technical data heat pump

Indoor unit			RAV-SM404SDT-E	RAV-SM564SDT-E
Outdoor unit			RAV-SP404ATP-E	RAV-SP564ATP-E
Cooling capacity	kW	❄️	3.60	5.30
Cooling capacity range (min.-max.)	kW	❄️	1.50-4.00	1.20-5.60
Power input	kW	❄️	1.03	1.56
Energy efficiency ratio EER		❄️	3.50	3.21
Energy efficiency ratio SEER		❄️	5.11	5.10
Pdesignc		❄️	3.60	5.00
Energy efficiency class		❄️	A	A
Application range (outside temp.)	°C	❄️	-15+43	-15+43
Heating capacity	kW	🔥	4.00	5.60
Heating capacity range (min.-max.)	kW	🔥	1.50-5.00	0.90-7.40
Power input	kW	🔥	1.00	1.44
Energy efficiency ratio COP		🔥	4.00	3.89
Energy efficiency ratio SCOP		🔥	3.90	3.90
Pdesignh	kW	🔥	3.80	5.40
Energy efficiency class		🔥	A	A
Application range (outside temp.)	°C	🔥	-15+15	-15+15

Indoor unit			RAV-SM404SDT-E	RAV-SM564SDT-E
Air flow*	m³/h		690	780
Max. external pressure	Pa		50	50
Sound pressure level**	dB(A)		39/33	45/36
Sound power level**	dB(A)		54/48	60/51
Dimensions [H x L x D]	mm		210 x 845 x 645	210 x 845 x 645
Weight	kg		22	22

Outdoor unit			RAV-SP404ATP-E	RAV-SP564ATP-E
Air flow*	m³/h		2400	2400
Sound pressure level	dB(A)	❄️ 🔥	45/47	47/48
Sound power level	dB(A)	❄️ 🔥	62/64	63/64
Flare connection suction line	in - mm		1/2 - 12.7	1/2 - 12.7
Flare connection liquid line	in - mm		1/4 - 6.4	1/4 - 6.4
Compressor type			Twin-rotary compressor	Twin-rotary compressor
Min. line length	m		5	5
Max. line length	m		30	50
Max. height difference	m		30	30
Power supply	V/ph/Hz		220-240/1/50	220-240/1/50
Fuse rating	A		10	16
Dimensions [H x L x D]	mm		550 x 780 x 290	550 x 780 x 290
Weight	kg		40	44

* At maximum fan speed

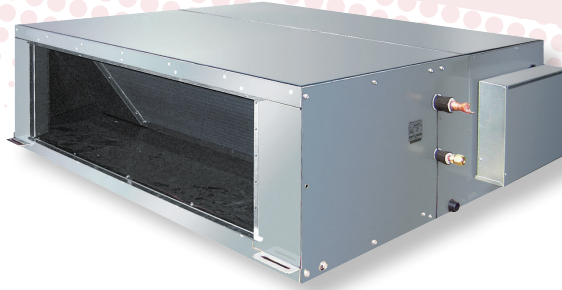
** At maximum and minimum fan speed - under inlet

❄️ Cooling

🔥 Heating



High-static ducted unit



RAV-SM2242DT-E, RAV-SM2802DT-E

Powerful cooling and heating

- With their high capacity these units offer great flexibility and are ideally suited to air condition larger buildings
- Discreet installation in suspended ceilings for enhanced room aesthetics
- Automatic restart after a power failure
- Built-in condensate lift pump with 850 mm lift
- Frost protection function allows constant room heating at 8°C in heating mode; can be activated via the remote control

Noticeable comfort

- Perfect air distribution via several air outlets to ensure even temperature conditions in all parts of the room
- External static pressure up to 196 Pa (3 steps: 68.6/137/196 Pa)
- Precise temperature control
- Single-speed fan

Clean air

- Fresh air supply possible with an external fan
- Self-cleaning function: the fan continues to run for a while after the unit is switched off to ensure that the heat exchanger is completely dry and prevent the formation of mould

Individual control

- Depending on the requirements the indoor units can optionally be controlled via the wired remote control, infrared remote control, weekly timer, central remote control, window contact and analogue control (0-10 V), operation and fault notification module as well as all available BMS systems

Further details on pages 58 and 59.

Digital Inverter RAV high-static ducted unit
Technical data heat pump

Indoor unit			RAV-SM2244DTP-E	RAV-SM2804DTP-E
Outdoor unit			RAV-SM2244AT8-E	RAV-SM2804AT8-E
Cooling capacity	kW	❄️	20.00	23.70
Cooling capacity range (min.-max.)	kW	❄️	9.80-22.40	9.80-27.00
Power input	kW	❄️	7.20	8.75
Energy efficiency ratio EER		❄️	3.18	2.71
Application range (outside temp.)	°C	❄️	-15-+46	-15-+46
Heating capacity	kW	🔥	22.40	27.00
Heating capacity range (min.-max.)	kW	🔥	9.80-25.00	9.80-31.50
Power input	kW	🔥	6.49	8.15
Energy efficiency ratio COP		🔥	3.79	3.75
Application range (outside temp.)	°C	🔥	-20-+15	-20-+15

Indoor unit			RAV-SM2244DTP-E	RAV-SM2804DTP-E
Air flow*	m³/h		3600	4800
Max. external pressure	Pa		250	250
Sound pressure level**	dB(A)		44/36	46/38
Sound power level**	dB(A)		79/71	81/73
Dimensions [H x L x D]	mm		448 x 1400 x 900	448 x 1400 x 900
Weight	kg		97	97

Outdoor unit			RAV-SM2244AT8-E	RAV-SM2804AT8-E
Air flow standard*	m³/h		7980	7980
Sound pressure level	dB(A)	❄️ 🔥	56/57	57/58
Sound power level	dB(A)	❄️ 🔥	72/74	74/75
Flare connection, suction-liquid line	in - mm		1-1/8 (3/4)-1/2 - 28.6-12.7	1-1/8 (3/4)-1/2 - 28.6-12.7
Compressor type			Twin-rotary compressor	Twin-rotary compressor
Min. line length	m		7.50	7.50
Max. line length	m		70	70
Max. height difference	m		30	30
Power supply	V/ph/Hz		380-415/3/50	380-415/3/50
Fuse rating	A		16	20
Dimensions [H x L x D]	mm		1540 x 900 x 320	1540 x 900 x 320
Weight	kg		134	134

* At maximum fan speed

** At maximum and minimum fan speed

❄️ Cooling

🔥 Heating



High-static ducted units are ideal for the air conditioning of offices and shops.

Twin-, triple- and quad-split systems

The twin-, triple- or quad-split system is ideally suited for shops, offices and storage areas, where only one temperature zone is required. In this case two, three or four indoor units can be connected to an outdoor unit with 10.0, 12.5, 20.0 or 23.0 kW cooling capacity, using T-pieces or three-way branch kits. The use of several indoor units guarantees perfect temperature distribution in the room. The indoor units must be installed in the same room, always run simultaneously and include a remote control.

- Twin-, triple- or quad-split operation is possible with the following indoor units if used with a wired remote control: 4-way cassette, 600 x 600 mm compact cassette, ducted, slim ducted, high-wall and under-ceiling units
- Design and capacity of the indoor units must be the same

- Precise capacity control
- Ideal for larger shops, open-plan offices and similar applications
- User-friendly controls
- Compact outdoor unit for easy installation
- Capacity tuning for optimised comfort
- Digital Inverter or Super Digital Inverter triple-split operation requires the 3-way branch kit RBC-TRP100E.



TWIN

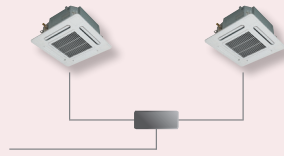
Digital Inverter



Cool	Heat	Digital Inverter	Indoor
5.0	5.3	SM564ATP-E	30 + 30
6.7	7.7	SM804ATP-E	40 + 40
10.0	11.2	SM1104ATP-E	56 + 56
10.0	11.2	SM1104AT8P-E	56 + 56
12.1	12.8	SM1404ATP-E	80 + 80
12.1	12.8	SM1404AT8P-E	80 + 80
14.0	16.0	SM1603AT-E1	80 + 80
20.0	22.4	SM2244AT8-E	110 + 110
23.0	27.0	SM2804AT8-E	140 + 140

TWIN

Super Digital Inverter



Cool	Heat	Super Digital Inverter	Indoor
5.3	5.6	SP564ATP-E	30 + 30
7.1	8.0	SP804ATP-E	40 + 40
10.0	11.2	SP1104AT-E1	56 + 56
10.0	11.2	SP1104AT8-E1	56 + 56
12.5	14.0	SP1404AT-E1	80 + 80
12.5	14.0	SP1404AT8-E1	80 + 80
14.0	16.0	SP1604AT8-E1	80 + 80

Possible model combinations*

TRIPLE

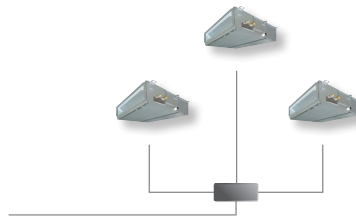
Digital Inverter



Cool	Heat	Digital Inverter	Indoor
10.0	11.2	SM1104ATP-E	30 + 30 + 30
10.0	11.2	SM1104AT8P-E	30 + 30 + 30
12.1	12.8	SM1404ATP-E	40 + 40 + 40
12.1	12.8	SM1404AT8P-E	40 + 40 + 40
14.0	16.0	SM1603AT-E1	56 + 56 + 56
20.0	22.4	SM2244AT8-E	80 + 80 + 80
23.0	27.0	SM2804AT8-E	80 + 80 + 80

TRIPLE

Super Digital Inverter



Cool	Heat	Super Digital Inverter	Indoor
10.0	11.2	SP1104AT-E1	30 + 30 + 30
10.0	11.2	SP1104AT8-E1	30 + 30 + 30
12.5	14.0	SP1404AT-E1	40 + 40 + 40
12.5	14.0	SP1404AT8-E1	40 + 40 + 40
14.0	16.0	SP1604AT8-E1	56 + 56 + 56

Possible model combinations*

QUAD

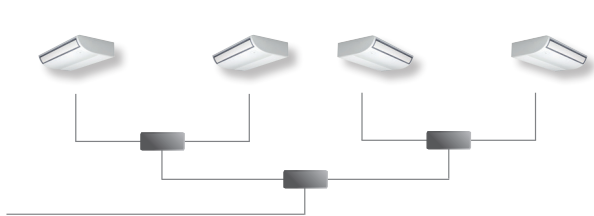
Digital Inverter



Cool	Heat	Digital Inverter	Indoor
12.1	12.8	SM1404ATP-E	30 + 30 + 30 + 30
12.1	12.8	SM1404AT8P-E	30 + 30 + 30 + 30
14.0	16.0	SM1603AT-E1	40 + 40 + 40 + 40
20.0	22.4	SM2244AT8-E	56 + 56 + 56 + 56
23.0	27.0	SM2804AT8-E	80 + 80 + 80 + 80

QUAD

Super Digital Inverter



Cool	Heat	Super Digital Inverter	Indoor
12.5	14.0	SP1404AT-E1	30 + 30 + 30 + 30
12.5	14.0	SP1404AT8-E1	30 + 30 + 30 + 30
14.0	16.0	SP1604AT8-E1	40 + 40 + 40 + 40

Possible model combinations*

* The indoor unit models must be identical.
For pipe dimensions and limits refer to the installation manuals.

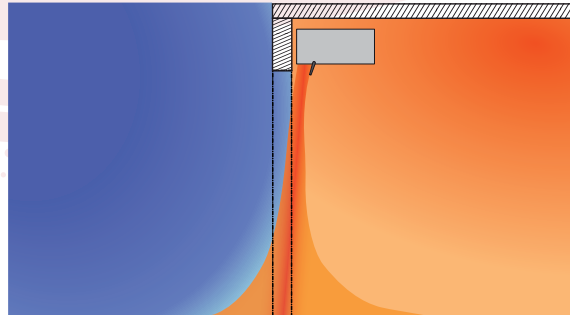
Air curtains

Air curtains prevent the air exchange between two environments with different temperature levels. This is useful if doors are left open or frequently opened for access. The air curtain forms a barrier of moving air blown across the door opening. Air cannot get to the other side through this invisible wall.



ENERGY SAVINGS

Prevents air draughts and reduces intrusion of non-conditioned outside air into heated or cooled areas. Also prevents escape of conditioned air to the outside.



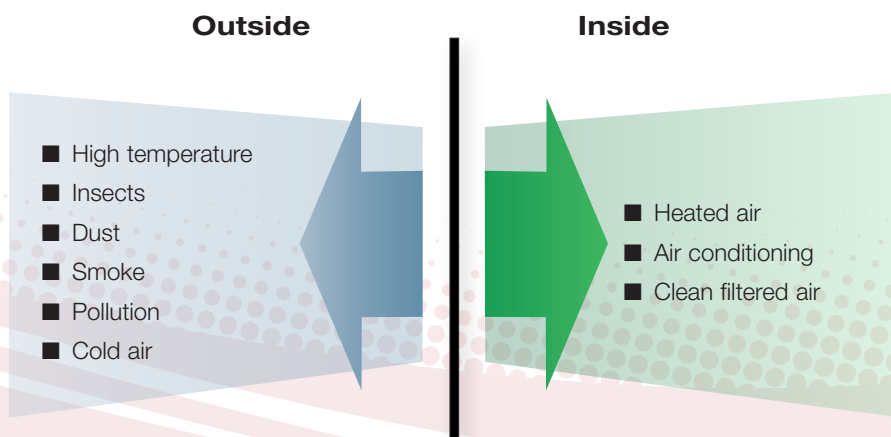
COMFORT

Enhanced comfort for customers and employees, as the intrusion of insects, dust, odours and smoke is significantly reduced.



ADVANCED HEAT PUMP TECHNOLOGY

Air curtains work very efficiently in combination with the high-efficiency Digital and Super Digital Inverters and ensure significant ecological benefits.



Air curtains

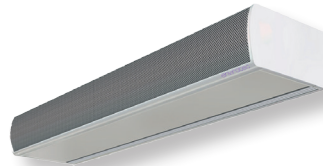
Toshiba offers four different standard air curtain versions. These models are all combined with the extremely reliable high-efficiency outdoor units of the Digital Inverter and Super Digital Inverter ranges.

Individual solutions (different colours and alignments) are also possible in addition to the standard model.

Overview of the technical features:

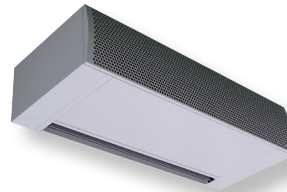
- Quick installation, as the integration of a pre-configured plug-and-play board makes the installation of a separate direct-expansion unit unnecessary
- The use of EC motors complying with ErP 2015 achieves higher air velocities and significantly reduces power consumption and weight
- No additional power supply at the indoor unit
- Models provided with flare connections
- Easy access for maintenance operations
- Choice of outlet grille positions
- All air curtains include defrost pans. The collected moisture evaporates as soon as heating restarts.

SUSPENDED UNIT (ES)



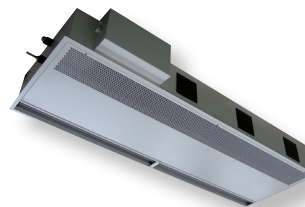
Suitable for installations above the door, the whole unit is visible.

SUSPENDED UNIT (CH)



Suitable for installations above the door, the whole unit is visible.

CASSETTE UNIT (UH)



Suitable for installations where ceiling space above the door is limited, the panel is visible.

CONCEALED UNIT (BH)



Suitable for installations in the ceiling above the door with only the intake grille and the outlet opening visible.



SUSPENDED UNIT (ES)

 Technical data **air curtain**

Model	ES	D-ES15-HP (Type D 1500 HP)
Capacity code	hp	4.00
Heating capacity	kW	10.30
COP (RAV-SP_AT-E1)	W/W	3.11
Air flow	m ³ /h	6060
Power input	kW	2.52
Sound pressure	dB(A)	54
Weight	kg	73
Dimensions [H x L x D]	mm	340 × 1500 × 520

SUSPENDED UNIT (CH)

 Technical data **air curtain**

Model	RAV-CT	101CH-M	101CH-L	151CH-M	151CH-L	201CH-M	201CH-L	251CH-M	251CH-L
Capacity code	hp	3.00	3.00	4.00	4.00	5.00	5.00	6.00	6.00
Heating capacity	kW	8.00	8.00	11.20	11.20	14.00	14.00	16.00	16.00
COP (RAV-SM_AT-E)	W/W	2.83	2.84	3.15	3.21	3.03	3.09	2.86	2.91
COP (RAV-SM_AT8P-E)	W/W	-	-	3.15	3.21	3.03	3.09	-	-
COP (RAV-SP_AT-E)	W/W	3.06	3.09	3.39	3.45	3.20	3.26	-	-
COP (RAV-SP_AT8-E)	W/W	-	-	3.39	3.45	3.20	3.26	2.92	2.97
Air flow	m ³ /h	1600	2210	2400	2950	3200	4420	4000	5160
Power input	kW	0.35	0.53	0.53	0.70	0.70	1.05	0.88	1.23
Sound pressure	dB(A)	54	55	55	56	56	57	57	58
Weight	kg	48	51	77	80	101	107	132	138
Dimensions [H x L x D]	mm	260 × 1210 × 490		260 × 1710 × 490		260 × 2210 × 490		260 × 2710 × 490	

CASSETTE UNIT (UH)

 Technical data **air curtain**

Model	RAV-CT	101UH-M	101UH-L	151UH-M	151UH-L	201UH-M	201UH-L	251UH-M	251UH-L
Capacity code	hp	3.00	3.00	4.00	4.00	5.00	5.00	6.00	6.00
Heating capacity	kW	8.00	8.00	11.20	11.20	14.00	14.00	16.00	16.00
COP (RAV-SM_AT-E)	W/W	2.83	2.84	3.15	3.21	3.03	3.09	2.86	2.91
COP (RAV-SM_AT8P-E)	W/W	-	-	3.15	3.21	3.03	3.09	-	-
COP (RAV-SP_AT-E)	W/W	3.06	3.09	3.39	3.45	3.20	3.26	-	-
COP (RAV-SP_AT8-E)	W/W	-	-	3.39	3.45	3.20	3.26	2.92	2.97
Air flow	m ³ /h	1600	2210	2400	2950	3200	4420	4000	5160
Power input	kW	0.35	0.53	0.53	0.70	0.70	1.05	0.88	1.23
Sound pressure	dB(A)	54	55	55	56	56	57	57	58
Weight	kg	40	43	95	98	99	105	120	126
Dimensions [H x L x D]	mm	260 × 1050 × 780		260 × 1550 × 780		260 × 2050 × 780		260 × 2550 × 780	

CONCEALED UNIT (BH)

 Technical data **air curtain**

Model	RAV-CT	101BH-M	101BH-L	151BH-M	151BH-L	201BH-M	201BH-L	251BH-M	251BH-L
Capacity code	hp	3.00	3.00	4.00	4.00	5.00	5.00	6.00	6.00
Heating capacity	kW	8.00	8.00	11.20	11.20	14.00	14.00	16.00	16.00
COP (RAV-SM_AT-E)	W/W	2.83	2.84	3.15	3.21	3.03	3.09	2.86	2.91
COP (RAV-SM_AT8P-E)	W/W	-	-	3.15	3.21	3.03	3.09	-	-
COP (RAV-SP_AT-E)	W/W	3.06	3.09	3.39	3.45	3.20	3.26	-	-
COP (RAV-SP_AT8-E)	W/W	-	-	3.39	3.45	3.20	3.26	2.92	2.97
Air flow	m ³ /h	1600	2210	2400	2950	3200	4420	4000	5160
Power input	kW	0.35	0.53	0.53	0.70	0.70	1.05	0.88	1.23
Sound pressure	dB(A)	54	55	55	56	56	57	57	58
Weight	kg	71	74	105	108	129	135	170	176
Dimensions [H x L x D]	mm	405-485 × 1105 × 720		405-485 × 1605 × 720		405-485 × 2105 × 720		405-485 × 2605 × 720	

AHU interface kit

RBC-AHU1

Air handling unit interface panel enables the connection of third-party air handling units with DX coil(s) to Toshiba light commercial Digital Inverter and Super Digital Inverter outdoor units.

Our versatile range of heat pump inverter-controlled outdoor units can be connected to DX coils installed in other manufacturers' air handlers in single or multiple circuits using any of the Toshiba range of Digital Inverter or Super Digital Inverter outdoor units available in capacity range from 2.5 kW to 27 kW.

Control is achieved using a standard Toshiba wired remote controller RBC-AMT32E (not supplied with control panel), set by DN code adjustment during commissioning.



Compatible with the outdoor units of the following product ranges:

- Digital Inverter
- Super Digital Inverter

Supply air temperature application limits:

- Cooling: "Air On" temp.: min. 15°C wb (18°C db)/ max. 24°C wb (32°C db)
- Heating: "Air On" temp.: min. 15°C db/max. 28°C db

Includes relay-isolated inputs to prevent accidental wiring errors damaging the PCB. Input/output signal available: operation output, AC fan motor output, alarm output, external On/Off input, safety cut-out input.

Available in 1 phase or 3 phase electrical supply versions, the Toshiba range of outdoor units will operate in ambient temperatures of -20°C to 46°C dependent on model size, and offers excellent part-load efficiency performance that delivers energy savings when operating in both heating and cooling seasons.

The Toshiba range of heat pump inverter-controlled outdoor units offers flexible design and easy installation when connected to our standard range of AHU interface control panels.

- Compatible with Toshiba control accessories
- External ON/OFF input
- Safety cut-out input to detect fan failure
- No additional expansion valves or mechanical equipment required
- Bespoke easy-to-use control set-up



AHU INTERFACE KIT

Technical data

Model			Cooling capacity min.-max. [kW]	Heating capacity min.-max. [kW]	Power supply to outdoor unit [V/ph/Hz]	AHU air flow min.-max. [m³/h]	Heat exchanger pipe diameter [mm - inch]
DI	1 hp	RAV-SM304ATP-E	0.90-3.00	0.80-4.50	220-240/1/50	480-720	9.52 - 3/8
DI	1.5 hp	RAV-SM404ATP-E	0.90-4.00	0.80-5.00	220-240/1/50	480-880	9.52 - 3/8
SDI		RAV-SP404ATP-E	1.50-4.00	1.50-5.00			
DI	2 hp	RAV-SM564ATP-E	1.50-5.60	1.50-6.30	220-240/1/50	480-1100	9.52 - 3/8
SDI		RAV-SP564ATP-E	1.20-5.60	0.90-8.10			
DI	3 hp	RAV-SM804ATP-E	1.50-8.00	1.50-9.00	220-240/1/50	700-1500	9.52 - 3/8
SDI		RAV-SP804ATP-E	1.90-8.00	1.30-11.30			
DI	4 hp	RAV-SM1104ATP-E	3.00-11.20	3.00-13.00	220-240/1/50	1260-2500	9.52 - 3/8
SDI		RAV-SP1104AT-E1	2.60-12.00	2.40-13.00			
DI		RAV-SM1104AT8P-E	3.00-11.20	3.00-13.00	380-415/3/50		
SDI		RAV-SP1104AT8-E1	2.60-12.00	2.40-15.60			
DI	5 hp	RAV-SM1404ATP-E	3.00-13.20	3.00-16.00	220-240/1/50	1260-2750	9.52 - 3/8
SDI		RAV-SP1404AT-E1	2.60-14.00	2.40-16.50			
DI		RAV-SM1404AT8P-E	3.00-13.20	3.00-16.00	380-415/3/50		
SDI		RAV-SP1404AT8-E1	2.60-14.00	2.40-18.00			
DI	6 hp	RAV-SM1603AT-E1	3.00-16.00	3.00-18.00	220-240/1/50	1260-3000	9.52 - 3/8
SDI		RAV-SP1604AT8-E1	2.60-16.00	2.40-19.00	380-415/3/50		
DI	8 hp	RAV-SM2244AT8-E	9.80-22.40	9.80-25.00	380-415/3/50	2880-4320	9.52 - 3/8
DI	10 hp	RAV-SM2804AT8-E	9.80-27.00	9.80-31.50	380-415/3/50	3360-5040	9.52 - 3/8

DI: Digital Inverter
SDI: Super Digital Inverter

Interface panel		RBC-AHU1
Power supply	V/ph/Hz	220-240/1/50
Dimensions [H × L × D]	mm	300 × 300 × 150
Weight	kg	10

Return air temperature application limits

Cooling: "Air On" temp.: min. 15°C wb (18°C db)/max. 24°C wb (32°C db)

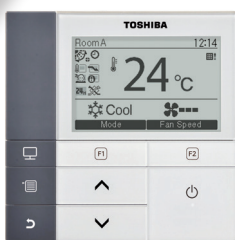
Heating: "Air On" temp.: min. 15°C db/max. 28°C db



TCC-LINK

- Flexible control
- Automatic addressing
- Digital 2-wire bus system
- Easy installation

Lite-Vision Plus remote control (RBC-AMS54E-ES)



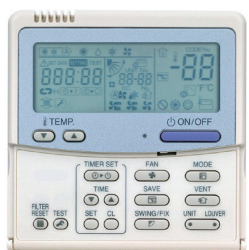
- Elegant wired remote control with weekly timer
- Multi-language menu navigation (D, E)
- Modern design with menu-guided function keys and backlighting
- Two hot keys (F1, F2) for easy operation of all indoor unit functions
- Simple menu navigation
- Operation of a single unit or a group of up to six indoor units
- Temperature display in 0.5 K intervals
- External temperature sensor (TA) built-in

Wired remote control with weekly timer (RBC-AMS41E)



- Large clear LCD display
- Easy to use
- All air conditioner functions controllable (mode, temperature, fan, louvres)
- Display of the current time
- Integrated weekly timer – up to eight events can be programmed for each day of the week (operating time, on/off, mode, temperature setpoint, keyboard lock)
- Up to eight indoor units (in a group) controllable
- Temperature sensor (can be activated)
- Filter cleaning indicator
- Fault diagnosis system

Standard wired remote control (RBC-AMT32E)



- Large clear LCD display
- Easy to use
- All air conditioner functions controllable (mode, temperature, fan, louvres)
- 168-hour on/off timer
- Up to eight indoor units (in a group) controllable
- Temperature sensor (can be activated)
- Filter cleaning indicator
- Fault diagnosis system

Simplified wired remote control (RBC-AS41E)



- Clear LCD display
- Easy to use
- All air conditioner functions controllable (mode, temperature, fan, louvres)
- Up to eight indoor units (in a group) controllable
- Temperature sensor (can be activated)
- Fault diagnosis system

Infrared remote control with external receiver kit

- Large clear LCD display
- Easy to use
- Mode selection (cooling, heating, dehumidification, fan)
- Temperature selection
- Louvre positioning (swing or fixed)
- Timer function (7-hour on/off timer)
- Sleep mode
- “Comfort Sleep”: time-based switch-off timer (1, 3, 5, 9 hours), activates a small temperature rise of 2 K for enhanced comfort
- “Quiet” mode for extra-quiet operation
- “High Power” mode with an increased air flow to ensure that the temperature setpoint is reached quickly
- “Pre-set”: Activation of the preferred pre-programmed settings
- Temperature sensor (can be activated)



The infrared remote control is included as standard with all RAV high-wall units.



TCB-AX32E2
Kit for all DI and SDI indoor units



RBC-AX32U(W)-E
Kit for 4-way cassette



RBC-AX33CE
Kit for under-ceiling units

Wi-Fi control

- Air conditioner control via all mobile devices such as smartphones, tablets or PCs
- Simple installation and commissioning
- Activation via an app (download in AppStore or Android Play Store)
- Permanent control: on/off, temperature setpoint, mode, fan speed, louvre position
- Display of the current room temperature, air conditioner status, feedback of each change as well as fault alarm



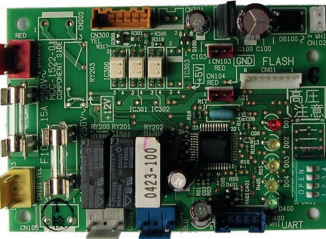
RBC-IS-IR-WIFI-1
Suitable for all RAV high-wall units with infrared communication



RBC-TO-RC-WIFI-1
Suitable for all RAV models; the control module is connected to the indoor unit by wire; connection as for a wired remote control via the A/B bus. Combination with RBC-AMS54E-ES (Lite-Vision Plus remote control) is not possible.



Peak power cut and noise reduction control (TCB-PCOS1E2)



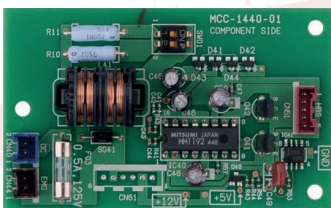
- Peak power cut and noise reduction control for DI-SDI outdoor units
- Peak power control 3 stages: 0%, 50%, 75%
- Noise reduction control 5 dB cooling mode
- Initiated by any suitable relay contact closure

Remote setpoint control (RBC-TSI1)



- Remote setpoint control (0-10 V)
Temperature, mode, fan speed, default for remote voltage or resistance value
- Setpoints adjustable via resistors or 0-10 V signals
- Enable/disable
- Operation/fault notification
- Modbus connection possible

Network adapter (TCB-PCNT30TLE)



- Network adapter to connect DI-SDI indoor units to the TCC-link network
- U3/U4 TCC-link connections
- Not required for high-wall KRT(P)-E indoor units

Possible combinations **TCC-link**

Indoor unit	600 x 600 mm compact cassette RAV- SM**4MUT-E	4-way cassette RAV- SM**4UTP-E	Ducted unit RAV- SM**6BTP-E	Slim ducted unit RAV- SM**4SDT-E	Under-ceiling unit RAV- SM**7CTP-E	High-wall unit RAV- SM**6KRT-E
Remote control						
RBC-AMS54E-ES Lite-Vision Plus remote control	✓	✓	✓	✓	✓	✓
RBC-AMS41E Remote control with weekly timer	✓	✓	✓	✓	✓	✓
RBC-AMT32E Wired remote control	✓	✓	✓	✓	✓	✓
RBC-AS41E Simple wired remote control	✓	✓	✓	✓	✓	✓
RBC-AX32U(W)-E IR-remote control & receiver kit	—	✓	—	—	—	—
RBC-AX33CE IR-remote control & receiver kit	—	—	—	—	✓	—
TCB-AX32E2 IR-remote control & remote receiver kit	✓	✓	✓	✓	✓	✓
TCB-EXS21TLE Weekly timer	✓	✓	✓	✓	✓	✓
TCB-CC163TLE2 On/off control	✓ Adapter TCB-PCNT30TLE2 required	✓ Adapter TCB-PCNT30TLE2 required	✓ Adapter TCB-PCNT30TLE2 required	✓ Adapter TCB-PCNT30TLE2 required	✓ Adapter TCB-PCNT30TLE2 required	✓
TCB-TC41LE Remote temperature sensor	✓	✓	✓	✓	✓	✓
TCB-PCNT30TLE2 Adapter DI & SDI TCC-link to VRF TCC-link	✓	✓	✓	✓	✓	Built in
WH-H2UE Infrared remote control	—	—	—	—	—	Included
TCB-PCOS1E2 Peak power cut and noise reduction control	✓	✓	✓	✓	✓	✓
RBC-SMCN61 ON/OFF and locking lead	✓	✓	✓	✓	✓	✓
TCB-IFLN642TLE LonWorks interface	✓ Adapter TCB-PCNT30TLE2 required	✓ Adapter TCB-PCNT30TLE2 required	✓ Adapter TCB-PCNT30TLE2 required	✓ Adapter TCB-PCNT30TLE2 required	✓ Adapter TCB-PCNT30TLE2 required	✓
BMS-SM1280ETLE Smart Manager with data analysis	✓ Adapter TCB-PCNT30TLE2 required	✓ Adapter TCB-PCNT30TLE2 required	✓ Adapter TCB-PCNT30TLE2 required	✓ Adapter TCB-PCNT30TLE2 required	✓ Adapter TCB-PCNT30TLE2 required	✓
RBC-T0-RC-WIFI-1 Wi-Fi control	✓	✓	✓	✓	✓	✓

Toshiba Air Conditioning

IT'S WHAT WE DO

We provide an extensive range of air conditioning systems for a wide variety of residential, commercial and business environments. All of our products provide a cost-effective solution for heating and cooling of buildings and are engineered with energy efficiency and reliability in mind, complying with European Eco-Design guidelines. Our residential air conditioning products feature modern designs with energy savings that create a comfortable atmosphere.

Our commercial systems include advanced solutions to ensure the thermal comfort and flexibility of offices, hotels and industrial buildings, with environmental initiatives such as R22 replacement technology.

With the total energy consumption of many buildings increasing, it is important to achieve energy savings in the field of comfort heating and cooling. That's why we've put emphasis on the development of innovative solutions within our compressors, coil technology and hybrid inverter controls that result in the improvement of the air conditioning system in terms of both performance and operating efficiency offering the highest levels of user comfort, superior air flows and improved energy consumption.



EUROVENT

Eurovent Certification certifies the performance ratings of air conditioning and refrigeration products according to European and international standards.

Toshiba's participation in the Eurovent program is a guarantee to its customers and users that our products will operate in accordance with the design specifications, that the data published and communicated are real and therefore the energy consumption and costs are correctly stated.

RELIABLE SOLUTIONS

Toshiba provides solutions for a wide range of sectors from large commercial offices, department stores, hospitals and laboratories through to smaller high street stores, food outlets, offices and server rooms. Our years of experience working with installers, retailers and specifiers have helped us to identify the challenges faced by our customers to develop bespoke solutions that exceed expectations.

As a result of our extremely low failure rate, Toshiba offers an industry-first 7-year 'Comprehensive Warranty'.



Toshiba brand pillars

Everything we are informs everything we do. Our core values help to shape our products and solutions – ensuring your business is supported in exactly the right ways.



Quality and reliability

Quality and reliability is at the heart of everything we do. With technologies being developed in more than 30 separate R&D laboratories, and over 300 subsidiary companies around the world, Toshiba engineers are dedicated to finding the best product solutions for you, the customer.



Environmental credentials and sustainability

Toshiba actively contributes to creating a richer lifestyle for society that is in harmony with the Earth. Our vision is to increase eco-efficiency by 2050 and improve the way we build our products. From full-featured laptops to consumer products, everything is built eco-smart and designed to minimise harm to the environment. To lessen the environmental impact and take action on CO₂ emissions, Toshiba Air Conditioning in the UK has been a certified CarbonNeutral® division since 2012.



Return on investment [ROI]

Our technology is built to last. In fact, we pride ourselves on developing quality, future-proof products that require less maintenance over their lifetime – which ultimately leads to a lower total cost of ownership.



Corporate social responsibility [CSR]

Our world today faces diverse social issues due to population growth, fast-growing demand for energy and shortages of natural resources. We contribute to solutions to these problems, while supporting our own steady and sustainable growth. Our CSR is supported by the activities of each and every one of our 200,000 employees.



Simplicity

Simplicity is at the heart of everything we do. We constantly strive to solve the many complexities of technology, trends and business with simple, eco and energy-efficient solutions – which leaves you free to focus on running your organisation.

ENVIRONMENTAL VISION 2050

Toshiba Group practises environmental management that promotes harmony with Earth, contributing to the creation of a richer lifestyle for society.



TOSHIBA Leading Innovation >>>

TOSHIBA dealer:

UK Headquarters

Toshiba Air Conditioning
United Technologies House,
Guildford Road,
Leatherhead,
Surrey
KT22 9UT

Tel: 01372 220240
Fax: 01372 220241
marketing.uk@toshiba-ac.com

Plymouth

Toshiba Carrier UK Limited
Porsham Close,
Belliver Industrial Estate,
Plymouth,
Devon
PL6 7DB

Tel: 0870 843 0333
Fax: 01752 784574
toshiba.salesdesk.uk@toshiba-ac.com
spares@toshiba-ac.com

Manchester

Toshiba Air Conditioning
Parkfield House
Manchester Old Road,
Middleton,
Manchester
M24 4DQ

Tel: 0870 843 0333
Fax: 0161 654 4476
technical.enquires@toshiba-ac.com

www.toshiba-aircon.co.uk

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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 are subject to change without prior notice.

WE CARE FOR NATURE.

