TOSHIBA

Light Commercial Inverter

EXPERIENCE THE FUTURE

Toshiba Airconditioning Absolute comfort

Toshiba's commitment to world-class efficiency, versatile scalability and trusted quality results in cutting-edge technology that gives our customers industry leading solutions for their needs. Toshiba Air Conditioning is a global provider of a comprehensive range of innovative air conditioning solutions with trusted, world class reliability. With several "World's Firsts" to its credit, Toshiba Air Conditioning has been the reliable source of next generation, energy efficient products and solutions for over 30 years.

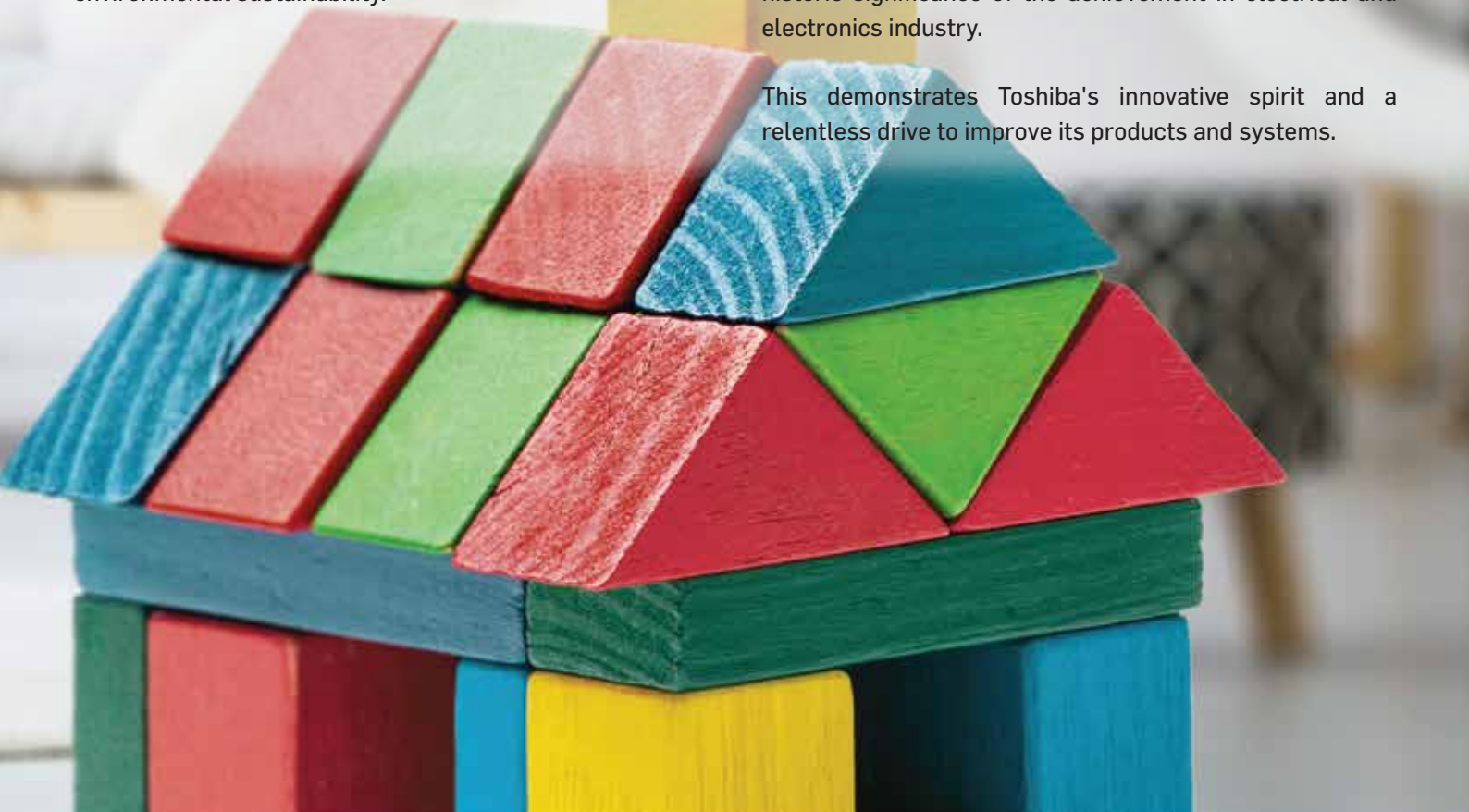
Toshiba's commitment to people drives attention to detail at every stage of the development process, from design to user field tests. As a result, Toshiba products and systems feature higher standard of indoor air quality, low sound levels, energy savings and unrivaled comfort along with environmental sustainability.

A Global Innovation Network

Toshiba Air Conditioning has research and development centers across Japan, Europe, Thailand and China. Its global research activities are managed and integrated to ensure all research sites collaborate to provide innovative solutions to customers across the world. The Toshiba brand holds more than 1200 patents in Japan and abroad, an outstanding number for any company.

Each year since 1994, Toshiba Air Conditioning has received prestigious awards for its significant achievements in air conditioning and in November 2020 the world's-first inverter split air conditioner that Toshiba developed and mass produced for commercial and residential applications in 1980 and 1981, respectively, was recognized by the Institute of Electrical and Electronics Engineers (IEEE) as an IEEE milestone for the historic significance of the achievement in electrical and electronics industry.

This demonstrates Toshiba's innovative spirit and a relentless drive to improve its products and systems.



ALWAYS ONE STEP AHEAD

1981 — First inverter-based air conditioner

1986 — Super Multi, multi air conditioner for buildings

1993 — First Toshiba VRF (MMS), modular system up to 40 HP

2000 — Digital twin rotary air conditioner

2001 — DC hybrid inverter

2003 — Super Power Eco using DC inverter rotary compressor & R410A

2006 — First digital inverter control

2010 — VRF (SMMS), Super Modular Multi System R410A

2015 — Toshiba's first mini VRF (MiNi SMMS)

VRF (SMMS-i)

VRF (SMMS-e) with NFC service tool

2016 — Monosplit R32

Entry Tier Model

2017 — Monosplit DAISEIKAI 9 R32

2018 — Full Multisplit range

2019 — Monosplit SEIYA R32

2020 — Monosplit R32 HAORI SHORAI Edge

2021 — ESTIA R32 Air-to-water heat pump

VRF (SHRM-e), Super Heat Recovery Multi System

Big DI, light commercial large-capacity air conditioner

Full light commercial range R32
DI R32
SDI R32

DI 3.5HP R32

IEEE* Milestone

Inverter Air conditioners

VRF (SMMS-u) Super Modular Multi System

Triple rotary compressor

* In 2020, the Institute of Electrical and Electronics Engineers awarded Toshiba for the invention of the Inverter Air Conditioner and the significant contribution made by the Toshiba Inverter to the advancement of society and industry.

Note: Selected models are available as per local regulations.

LIGHT COMMERCIAL INVERTER

Solutions for professionals, by professionals

Toshiba Inverter Light Commercial Systems are extremely compact units that provide exceptional operational savings. With state-of-the-art technology, flexible controls and improved installation flexibility, they ensure comfort and convenience for business, large residential applications and others installations.

Toshiba Inverter Light Commercial Systems offer a complete range of indoor units to suit a comprehensive range of commercial and large residential requirements. The range has been expanded with maximum cooling capacities to benefit commercial applications with larger heat loads.

> Features

- R410A refrigerant.
- Improved energy saving resulting from DC motor in the indoor units.
- Ease and flexibility of installation.
- Aqua resin magic coil in FCU prevents dirt accumulation ensuring healthy air and improved IAQ.
- Fireproof electrical enclosure for both indoor and outdoor unit.

Product lineup

Type	Size	18	24	30	36	48	60
	kW	5.28	6.6	8.8	10.1	12.5	14.2
Standard duct							
Cooling only		RAV-SH1801BP-2B	RAV-SH2401BP-2B	RAV-SH3001BP-2B	RAV-SH3601BP-2B	RAV-SH4801BP-2B	*RAV-SH6001BP-2B
Heat pump		RAV-SH1801BTP-2B	RAV-SH2401BTP-2B	RAV-SH3001BTP-2B	RAV-SH3601BTP-2B	RAV-SH4801BTP-2B	**RAV-SH6001BTP-2B
Condensing unit							
Cooling only		RAV-SHB1801AP-2B	RAV-SHB2401AP-2B	RAV-SHB3001AP-2B	RAV-SHB3601AP-2B	RAV-SHB4801A8P-2B	RAV-SHB6001A8P-2B
Heat pump		RAV-SHB1801ATP-2B	RAV-SHB2401ATP-2B	RAV-SHB3001ATP-2B	RAV-SHB3601ATP-2B	RAV-SHB4801AT8P-2B	RAV-SHB6001AT8P-2B

*RAV-SH6001BP-2B, *RAV-SH6001BP-2B1
**RAV-SH6001BTP-2B, RAV-SH6001BTP-2B1

Type	Size	18	24	30	36	48
	kW	5.28	7.5	8.8	10.6	12.5
4-way cassette						
Cooling only		RAV-SH1801UP-2B	RAV-SH2401UP-2B	RAV-SH3001UP-2B	RAV-SH3601UP-2B	RAV-SH4801UP-2B
Heat pump		RAV-SH1801UTP-2B	RAV-SH2401UTP-2B	RAV-SH3001UTP-2B	RAV-SH3601UTP-2B	RAV-SH4801UTP-2B
Condensing unit						
Cooling only		RAV-SHU1801AP-2B	RAV-SHU2401AP-2B	RAV-SHU3001AP-2B	RAV-SHU3601AP-2B	RAV-SHU4801A8P-2B
Heat pump		RAV-SHU1801ATP-2B	RAV-SHU2401ATP-2B	RAV-SHU3001ATP-2B	RAV-SHU3601ATP-2B	RAV-SHU4801AT8P-2B

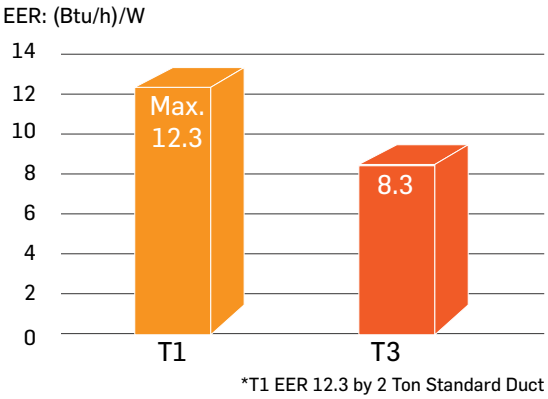


> Features

High efficiency

Toshiba's unique combination of twin rotary compressor and all inverter driven control contribute to guaranteed accuracy and high efficiency.

>>> Realize high efficiency both* T1 and T3

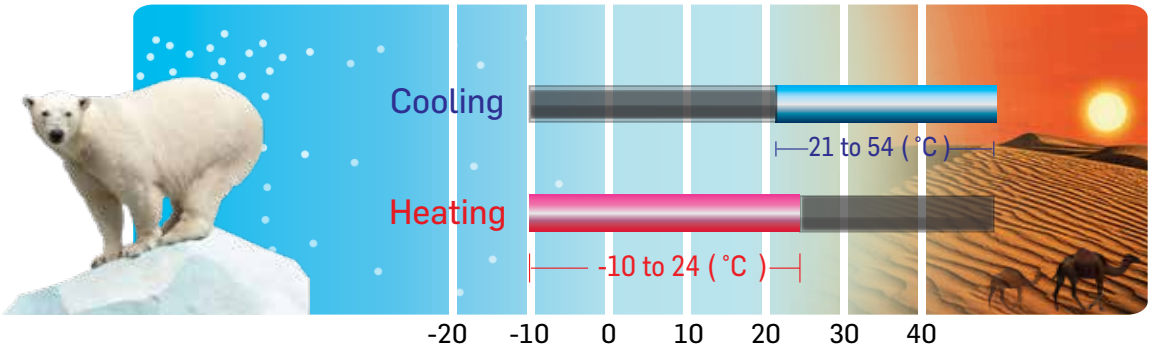


*T1 EER 12.3 by 2 Ton Standard Duct

Condition
T1 : Indoor air temperature 27°C DB / 19°C WB, Outdoor air temperature 35°C DB
T3 : Indoor air temperature 29°C DB / 19°C WB, Outdoor air temperature 46°C DB

Outside temperature

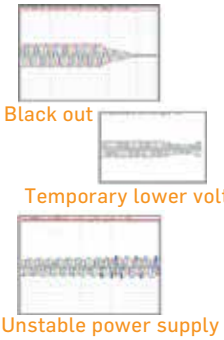
Designed for the Middle East, the LC-Inverter has a wide operating range complimented by the high reliability of twin rotary compressors.



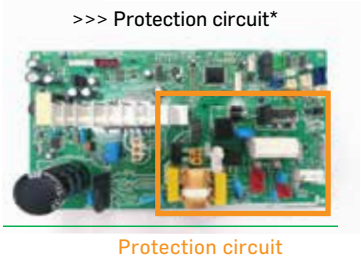
Protection circuit

Toshiba's LC Inverter offers a protection circuit (as standard) that protects the PC board under unstable power supply* and a function that detects incorrect wiring of the power supply for the 3-Phase product.

*3Phase 380-400V 10%



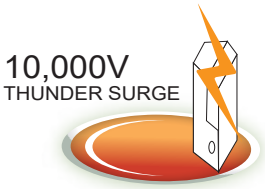
>>> Protection circuit*



Protection circuit

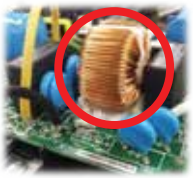
Thunder surge protection

Surge absorber device (standard) protects the PCB from high current (up to 10,000 volts) such as resulting from a thunder surge.



Noise filter

The system includes a noise filter to prevent voltage fluctuation ensuring that the air conditioner operates smoothly and with high reliability.

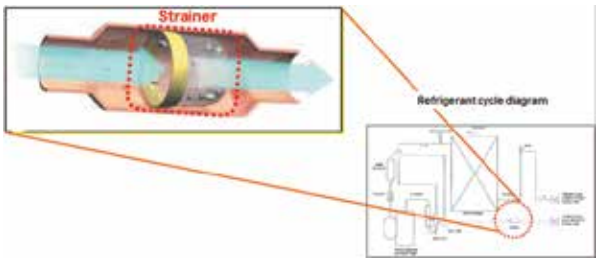


Twin rotary compressor

Toshiba's unique combination of twin rotary compressor and all inverter driven control with R410A refrigerant contribute to guaranteed accuracy and enables our customers to benefit from the expertise of flawless Japanese technology.

Strainer in gas pipe

The Toshiba LC Inverter has a strainer in the gas pipe that removes dust and metal abrasion powder.



Fireproof electrical enclosure

Fully fireproof electrical enclosure for both indoor and outdoor units ensures safety by preventing fire spread, explosions and fire-burn.

Ducted with DC motor

RAV-SH****BP
RAV-SH****BTP

2.0, 3.0 and 3.3 HP

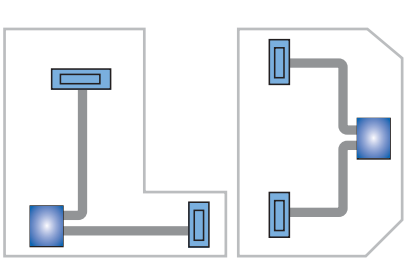
4.0 and 5.0 HP

7.0 HP

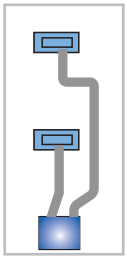
Features

Flexible ducting options for complete design flexibility

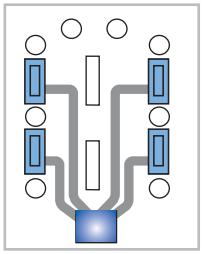
Suitable for ducted applications, Toshiba Ducted Units offer complete design flexibility and operate with high static pressure to ensure that all areas of the room can be reached for an even temperature distribution, irrespective of the complexity of piping layouts.



Polygonal rooms



Narrow rooms



Rooms with fixture and obstacles

High static pressure and Air volume

1.5 Ton; Max 120Pa & 880 CFM (30Pa)
2.0 Ton; Max 120Pa & 880 CFM (30Pa)
2.5 Ton; Max 160Pa & 1,180 CFM (50Pa)
3.0 Ton; Max 180Pa & 1,300 CFM (50Pa)
4.0 Ton; Max 180Pa & 1,765 CFM (50Pa)
5.0 Ton; Max 180Pa & 2,120 CFM (50Pa)

Fireproof electrical enclosure

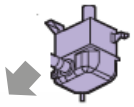
Fully fireproof electrical enclosure for both indoor and outdoor units ensures safety by preventing fire spread, explosions and fire-burn.

Installation flexibility

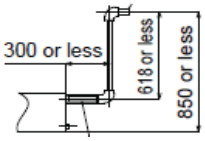
- Drain pump is standard for size 18 - 48 (Size 60 optional)
- Factory fitted standard air filter for sizes 18 – 30 *
- Back or under air intake is selectable
- High-lift drain pump

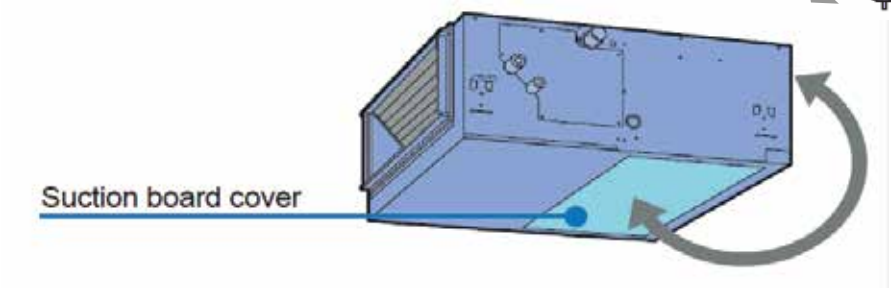
* Order separately for sizes 36 - 60

Drain pump inside FCU

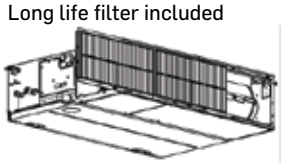


High -lift drain pump : 850 mm, from bottom side



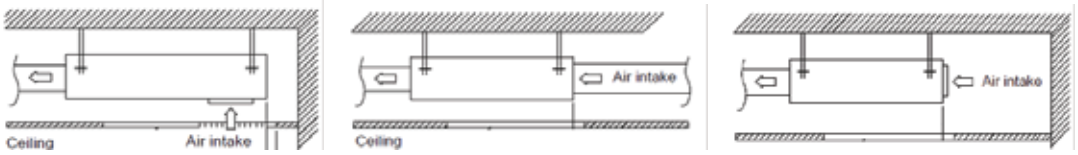


Long life filter included



Installation is flexible by changing from the back to the under air intake. Suction board cover can be fixed either at the bottom or the back of unit.

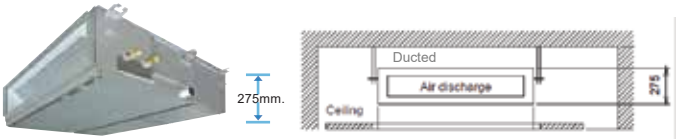
Various installation options for air suction



Compact sizing

Compact size especially height (275mm* and 298mm**) offers a wide range of installation options for the customer.

*Size 18,24,30 **Size 36,48



Flexible ducting

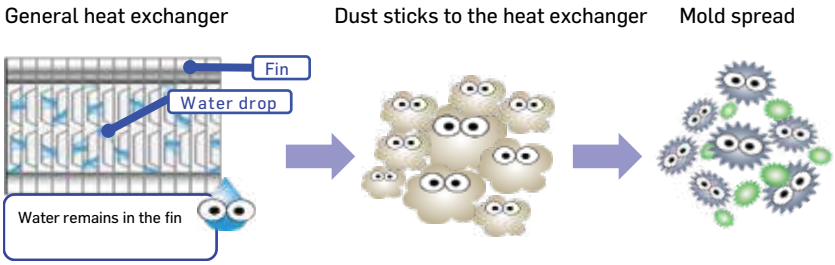
- Design flexibility
- Max. 180Pa with DC motor

Flexible Installation

- Back or under air intake
- High-lift drain pump (850 mm. from the bottom side)

Self clean operation

Automatic washing of the aquaresin coated indoor unit fins using condensate water ensures prevention of dust accumulation and the spread of mold.

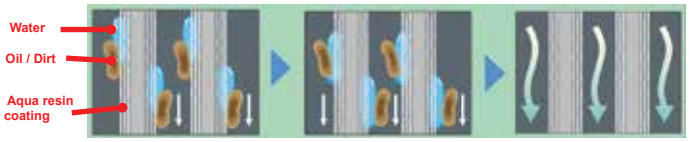


Accumulation of dust resulting from long hours of operation.

Aqua resin coated Magic coil in FCU

The aqua resin coating prevents dirt from sticking to the fins while condensation water flow washes away dirt. After washing, a drying operation suppresses the propagation of mold.

Magic Coil heat exchanger



Built-in high-lift drain pump

The flexible piping layout is made possible by a drain-pump kit that raises the drain piping up to 850mm. The drain-pump kit is standard for size 18-48 (size 60 is optional)

High static pressure

External static pressure can be raised as high as 180Pa, so that all areas of the room can be covered for an even temperature distribution, irrespective of the piping layout complexity.

Remote Control

TCB-AX32E2
RBC-AXU31-E
Wireless remote controller kit

RBC-ASC11E
RBC-ASC11UE

RBC-AMT32E
RBC-AMTU31-E
Wired remote controller

RBC-AMS55E-EN/ES
RBC-AMSU51-EN/ES

Standard duct

Specifications

Cooling only

Model		Indoor unit			RAV-SH1801BP-2B	RAV-SH2401BP-2B	RAV-SH3001BP-2B	RAV-SH3601BP-2B	RAV-SH4801BP-2B	*RAV-SH6001BP-2B
		Outdoor unit			RAV-SHB1801AP-2B	RAV-SHB2401AP-2B	RAV-SHB3001AP-2B	RAV-SHB3601AP-2B	RAV-SHB4801A8P-2B	RAV-SHB6001A8P-2B
Power supply					1phase 220-240V/60Hz				3phase 380-400V 60Hz	
Cooling capacity	T1	Capacity		BTU/h (kW)	18,000 < 5,460 - 20,470 > (5.28 < 1.6 - 6.0 >)	22,520 < 6,820 - 27,300 > (6.60 < 2.0 - 8.0 >)	30,000 < 10,230 - 34,100 > (8.80 < 3.0 - 10.0 >)	34,460 < 10,230 - 38,210 > (10.1 < 3.0 - 11.2 >)	42,650 < 13,650 - 54,250 > (12.5 < 4.0 - 15.9 >)	48,450 < 17,060 - 64,820 > (14.2 < 5.0 - 19.0 >)
		Power consumption		(kW)	1.46	1.91	2.48	2.92	3.62	3.94
		EER		(Btu/h.W)	12.30	11.80	12.10	11.80	11.80	12.30
	T3	Capacity		(kW)	4.50	5.61	7.50	8.60	11.00	12.60
		Power consumption		(kW)	1.85	2.31	3.09	3.52	4.51	4.51
		EER		(Btu/h.W)	8.30	8.30	8.30	8.30	8.30	9.55
Indoor unit specifications										
Outer dimension		Main unit	Height	mm(inch)	275 (10.8)	275 (10.8)	275 (10.8)	298 (11.7)	298 (11.7)	448 (17.6)
			Width	mm(inch)	1000 (39.4)	1000 (39.4)	1400 (55.1)	1400 (55.1)	1400 (55.1)	1400 (55.1)
			Depth	mm(inch)	750 (29.5)	750 (29.5)	750 (29.5)	750 (29.5)	750 (29.5)	900 (35.4)
Total weight		Main unit		(kg)	30.0	30.0	40.0	42.0	42.0	97.0
Fan					Centrifugal fan					
Standard air flow		H/M/L		(CFM)	880 / 706 / 470	880 / 790 / 530	1180 / 1000 / 706	1300 / 1180 / 824	1765 / 1590 / 918	2120 / 1900 / 1470
Standard air flow		H/M/L		(m^3/h)	1500 / 1200 / 800	1500 / 1350 / 900	2000 / 1700 / 1200	2300 / 2000 / 1400	3000 / 2700 / 1560	3600 / 3240 / 2500
Sound pressure level		H/M/L		(dB)	41 / 38 / 33	41 / 39 / 36	42 / 41 / 38	44 / 43 / 39	53 / 50 / 41	44 / 40 / 36
External static pressure		Standard (Upper - Lower)		(Pa)	30 (120-30)	30 (120-30)	50 (160-30)	50 (180-30)	50 (180-30)	50 (180-30)
Indoor filter					Yes			TCB-LK1401D-E	TCB-LK1401D-E	TCB-LK2801DP-E
Outdoor unit specifications										
Heat Exchanger					Cu-Al					
Outer dimension		Height		mm(inch)	550 (21.6)	630 (24.8)	890 (35.0)	890 (35.0)	1340 (52.7)	1340 (52.7)
		Width		mm(inch)	780 (30.7)	800 (31.5)	900 (35.4)	900 (35.4)	900 (35.4)	900 (35.4)
		Depth		mm(inch)	290 (11.4)	300 (11.8)	320 (12.6)	320 (12.6)	320 (12.6)	320 (12.6)
Total weight		Main unit		(kg)	41.0	46.0	69.0	71.0	102.0	103.0
Pipe		Min. length		(m)	5	5	5	5	5	5
		Max. total length		(m)	35	35	35	35	50	50
Flare Connections		Gas side		mm(inch)	12.7(1/2)	15.9(5/8)	15.9(5/8)	15.9(5/8)	15.9(5/8)	19.0(6/8)
		Liquid side		mm(inch)	6.4(1/4)	9.5(3/8)	9.5(3/8)	9.5(3/8)	9.5(3/8)	9.5(3/8)
Refrigerant					R410A					
Sound pressure level		Cooling		(dB)	47	52	54	57	63	63
Operating Range		Cooling		(°C)	21 / 54					

*RAV-SH6001BP-2B, RAV-SH6001BP-2B1

Heat pump

Model		Indoor unit			RAV-SH1801BTP-2B	RAV-SH2401BTP-2B	RAV-SH3001BTP-2B	RAV-SH3601BTP-2B	RAV-SH4801BTP-2B	**RAV-SH6001BTP-2B
		Outdoor unit			RAV-SHB1801ATP-2B	RAV-SHB2401ATP-2B	RAV-SHB3001ATP-2B	RAV-SHB3601ATP-2B	RAV-SHB4801AT8P-2B	RAV-SHB6001AT8P-2B
Power supply					1phase 220-240V/60Hz				3phase 380-400V 60Hz	
Cooling capacity	T1	Capacity		BTU/h (kW)	18,000 < 5,460 - 20,470 > (5.28 < 1.6 - 6.0 >)	22,520 < 6,820 - 27,300 > (6.60 < 2.0 - 8.0 >)	30,000 < 10,230 - 34,100 > (8.80 < 3.0 - 10.0 >)	34,460 < 10,230 - 38,210 > (10.1 < 3.0 - 11.2 >)	42,650 < 13,650 - 54,250 > (12.5 < 4.0 - 15.9 >)	48,450 < 17,060 - 64,820 > (14.2 < 5.0 - 19.0 >)
		Power consumption		(kW)	1.46	1.91	2.48	2.92	3.62	3.62
		EER		(Btu/h.W)	12.30	11.80	12.10	11.80	11.80	12.30
	T3	Capacity		(kW)	4.50	5.61	7.50	8.60	11.00	12.60
		Power consumption		(kW)	1.85	2.31	3.09	3.52	4.51	4.51
		EER		(Btu/h.W)	8.30	8.30	8.30	8.30	8.30	9.55
Heating capacity	H1	Capacity		(kW)	6.0 < 1.6 - 6.5 >	8.0 < 2.7 - 9.4 >	9.3 < 2.5 - 10.6 >	10.1 < 3.0 - 11.6 >	16.0 < 4.2 - 19.0 >	16.5 < 4.0 - 19.5 >
		Power consumption		(kW)	1.45	2.16	2.42	2.97	4.57	4.58
		COP		(Btu/h.W)	14.19	12.64	13.25	11.58	11.93	12.30
Indoor unit specifications										
Outer dimension		Main unit	Height	mm(inch)	275 (10.8)	275 (10.8)	275 (10.8)	298 (11.7)	298 (11.7)	448 (17.6)
			Width	mm(inch)	1000 (39.4)	1000 (39.4)	1400 (55.1)	1400 (55.1)	1400 (55.1)	1400 (55.1)
			Depth	mm(inch)	750 (29.5)	750 (29.5)	750 (29.5)	750 (29.5)	750 (29.5)	900 (35.4)
Total weight		Main unit		(kg)	30.0	30.0	40.0	42.0	42.0	97.0
Fan					Centrifugal fan					
Standard air flow		H/M/L		(CFM)	880 / 706 / 470	880 / 790 / 530	1180 / 1000 / 706	1300 / 1180 / 824	1765 / 1590 / 918	2120 / 1900 / 1470
Standard air flow		H/M/L		(m3/h)	1500 / 1200 / 800	1500 / 1350 / 900	2000 / 1700 / 1200	2300 / 2000 / 1400	3000 / 2700 / 1560	3600 / 3240 / 2500
Sound pressure level		H/M/L		(dB)	41 / 38 / 33	41 / 39 / 36	42 / 41 / 38	44 / 43 / 39	53 / 50 / 41	44 / 40 / 36
External static pressure		Standard (Upper - Lower)		(Pa)	30 (120-30)	30 (120-30)	50 (160-30)	50 (180-30)	50 (180-30)	50 (180-30)
Indoor filter					Yes			TCB-LK1401D-E	TCB-LK1401D-E	TCB-LK2801DP-E
Outdoor unit specifications										
Heat Exchanger					Cu-Al					
Outer dimension		Height		mm(inch)	550 (21.6)	630 (24.8)	890 (35.0)	890 (35.0)	1340 (52.7)	1340 (52.7)
		Width		mm(inch)	780 (30.7)	800 (31.5)	900 (35.4)	900 (35.4)	900 (35.4)	900 (35.4)
		Depth		mm(inch)	290 (11.4)	300 (11.8)	320 (12.6)	320 (12.6)	320 (12.6)	320 (12.6)
Total weight		Main unit		(kg)	41.0	46.0	69.0	71.0	102.0	103.0
Pipe		Min. length		(m)	5	5	5	5	5	5
		Max. total length		(m)	35	35	35	35	50	50
Flare Connections		Gas side		mm(inch)	12.7(1/2)	15.9(5/8)	15.9(5/8)	15.9(5/8)	15.9(5/8)	19.0(6/8)
		Liquid side		mm(inch)	6.4(1/4)	9.5(3/8)	9.5(3/8)	9.5(3/8)	9.5(3/8)	9.5(3/8)
Refrigerant					R410A					
Sound pressure level		Cooling / Heating		(dB)	47 / 51	52 / 55	54 / 56	57 / 57	63 / 63	63 / 63
Operating Range		Cooling		(°C)	21 / 54					
		Heating		(°C)	-10 / 24					

T1 Rated conditions Cooling: Indoor air temperature @ 27°C DB / 19°C WB and outdoor air temperature @ 35°C DB
T3 Rated conditions Cooling: Indoor air temperature @ 29°C DB / 19°C WB and outdoor air temperature @ 46°C DB
H1 Rated conditions Heating : Indoor air temperature 20°C DB and Outdoor air temperature 7°C DB/6°C WB

**RAV-SH6001BTP-2B, RAV-SH6001BTP-2B1

4-way cassette

RAV-SH****UP
RAV-SH****UTP

RBC-U31PGXP(W)-IN1

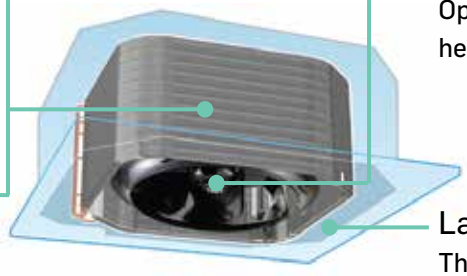
Features

Efficiency

The Toshiba 4-way inverter cassette incorporates several energy saving technologies to improve operational efficiency and increase cost savings.

Magic coil
Maintains efficient heat transfer rate and energy saving by flushing oil and dirt with condensation water.

Long slit of heat exchanger
Improves heat transfer rate by mixing airflow more effectively.

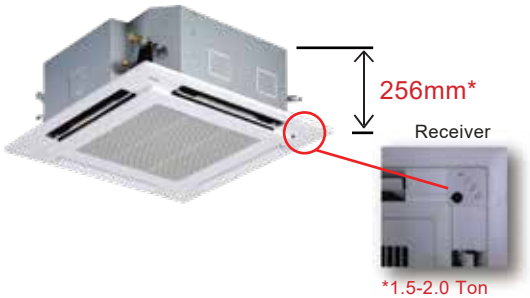


High efficiency DC fan motor
Optimizes DC Fan motor for fan and heat exchanger.

Large opening of AC vent
The Toshiba 4-way cassette features an enlarged AC vent to reduce the noise caused by large air volumes.

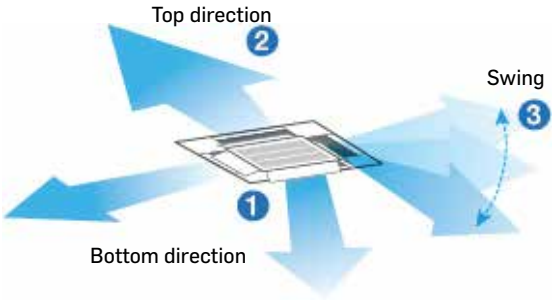
Compact sizing

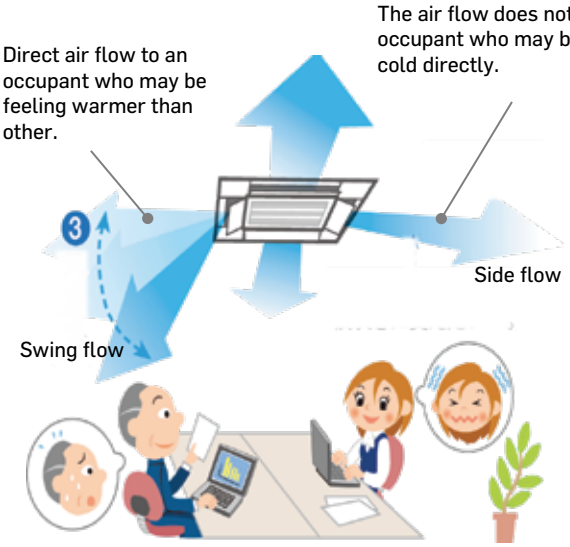
Compact size, specially height (256mm) offer wide installation flexibility to the customer.



Comfort

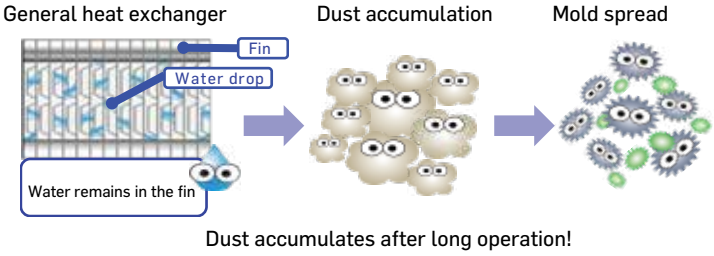
Each louver can be controlled individually ensuring accuracy in directional control of airflow.





Self clean operation

Automatic washing of the aquaresin coated indoor unit fins using condensate water.



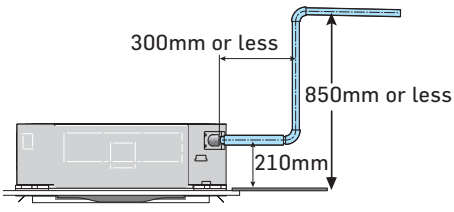
Dust accumulates after long operation!

Fireproof electrical enclosure

Fully fireproof electrical enclosure for both indoor and outdoor units ensures safety by preventing fire spread, explosions and fire-burn.

850mm drain pump

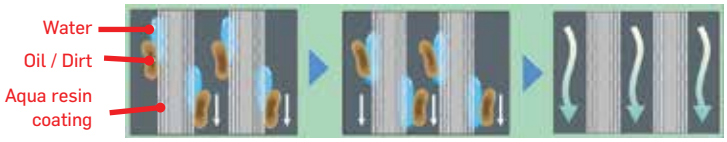
Drain can be discharged upwards to 850mm. This ensures a high degree of freedom in the piping layout.



Magic coil in FCU by Aqua resin coated

Automatic washing of the aqua resin coated indoor unit fins using condensate water ensures prevention of dust accumulation and the spread of mold. After washing, a drying operation suppresses mold build-up.

Magic Coil heat exchanger



Remote Control

Wireless Remote (Standard)

RBC-ASC11E
RBC-ASC11UE

RBC-AMT32E
RBC-AMTU31-E

RBC-AMS55E-EN/ES
RBC-AMSU51-EN/ES

Wired remote controller

4-Way Cassette Specifications

Cooling only

Model		Indoor unit			RAV-SH1801UP-2B	RAV-SH2401UP-2B	RAV-SH3001UP-2B	RAV-SH3601UP-2B	RAV-SH4801UP-2B
		Outdoor unit			RAV-SHU1801AP-2B	RAV-SHU2401AP-2B	RAV-SHU3001AP-2B	RAV-SHU3601AP-2B	RAV-SHU4801A8P-2B
Power supply					1phase 220-240V/60Hz				3Phase 380-400V 60Hz
Cooling capacity	T1	Capacity		BTU/h (kW)	18,000 < 5,460 - 20,470> 5.28 < 1.6 - 6.0 >	24,050 < 6,820 - 27,300> 7.05 < 2.0 - 8.0 >	30,020 < 10,230 - 34,100> 8.80 < 3.0 - 10.0 >	36,160 < 10,230 - 38,210> 10.6 < 3.0 - 11.2 >	42,650 < 13,650 - 54,250> 12.5 < 4.0 - 15.9 >
		Power consumption		(kW)	1.46	2.06	2.45	2.97	3.62
		EER		(Btu/h.W)	12.20	11.80	12.25	12.20	11.80
	T3	Capacity		(kW)	4.50	6.06	7.50	9.10	11.00
		Power consumption		(kW)	1.85	2.49	3.09	3.74	4.51
		EER		(Btu/h.W)	8.30	8.30	8.30	8.30	8.30
Indoor unit specifications									
Outer dimension		Main unit	Height	mm(inch)	256 (10.1)	256 (10.1)	319 (12.6)	319 (12.6)	319 (12.6)
			Width	mm(inch)	840 (33.1)	840 (33.1)	840 (33.1)	840 (33.1)	840 (33.1)
			Depth	mm(inch)	840 (33.1)	840 (33.1)	840 (33.1)	840 (33.1)	840 (33.1)
		Ceiling panel (Sold separately)	Height	mm(inch)	30 (1.2)	30 (1.2)	30 (1.2)	30 (1.2)	30 (1.2)
			Width	mm(inch)	950 (37.4)	950 (37.4)	950 (37.4)	950 (37.4)	950 (37.4)
			Depth	mm(inch)	950 (37.4)	950 (37.4)	950 (37.4)	950 (37.4)	950 (37.4)
Ceiling panel (Sold separately)					Model : RBC-U31PGXP(W)-IN1				
Total weight		Main unit		(kg)	20.0		24.0		
		Ceiling panel (Sold		(kg)	4.2				
Fan					Turbo fan				
Standard air flow		H/M/L		(CFM)	618 / 512 / 460	720 / 565 / 480	1236 / 847 / 690	1265 / 880 / 720	1350 / 1090 / 880
Standard air flow		H/M/L		(m^3/h)	1050 / 870 / 780	1230 / 960 / 810	2100 / 1440 / 1170	2150 / 1500 / 1260	2300 / 1840 / 1500
Sound pressure level		H/M/L		(dB)	37 / 36 / 34	40 / 37 / 36	46 / 42 / 37	47 / 43 / 39	49 / 45 / 43
Outdoor unit specifications									
Heat Exchanger					Cu-Al				
Outer dimension		Height		mm(inch)	550 (21.6)	630 (24.8)	890 (35.0)	890 (35.0)	1340 (52.7)
		Width		mm(inch)	780 (30.7)	800 (31.5)	900 (35.4)	900 (35.4)	900 (35.4)
		Depth		mm(inch)	290 (11.4)	300 (11.8)	320 (12.6)	320 (12.6)	320 (12.6)
Total weight		Main unit		(kg)	41.0	46.0	69.0	71.0	102.0
Pipe		Min. length		(m)	5	5	5	5	5
		Max. total length		(m)	35	35	35	35	50
Flare Connections		Gas side		mm(inch)	12.7 (1/2)	15.9 (5/8)	15.9 (5/8)	15.9 (5/8)	15.9 (5/8)
		Liquid side		mm(inch)	6.4 (1/4)	9.5 (3/8)	9.5 (3/8)	9.5 (3/8)	9.5 (3/8)
Refrigerant					R410A				
Sound pressure level		Cooling		(dB)	47	52	54	57	63
Operating Range		Cooling		(°C)	21 / 54				

Heat pump

Model		Indoor unit			RAV-SH1801UTP-2B	RAV-SH2401UTP-2B	RAV-SH3001UTP-2B	RAV-SH3601UTP-2B	RAV-SH4801UTP-2B
		Outdoor unit			RAV-SHU1801ATP-2B	RAV-SHU2401ATP-2B	RAV-SHU3001ATP-2B	RAV-SHU3601ATP-2B	RAV-SHU4801AT8P-2B
Power supply					1phase 220-240V/60Hz				3Phase 380-400V 60Hz
Cooling capacity	T1	Capacity		BTU/h (kW)	18,000 < 5,460 - 20,470> 5.28 < 1.6 - 6.0 >	24,050 < 6,820 - 27,300> 7.05 < 2.0 - 8.0 >	30,020 < 10,230 - 34,100> 8.80 < 3.0 - 10.0 >	36,160 < 10,230 - 38,210> 10.6 < 3.0 - 11.2 >	42,650 < 13,650 - 54,250> 12.5 < 4.0 - 15.9 >
		Power consumption		(kW)	1.46	2.06	2.45	2.97	3.62
		EER		(Btu/h.W)	12.20	11.80	12.25	12.20	11.80
	T3	Capacity		(kW)	4.50	6.06	7.50	9.10	11.00
		Power consumption		(kW)	1.85	2.49	3.09	3.74	4.51
		EER		(Btu/h.W)	8.30	8.30	8.30	8.30	8.30
Heating capacity	H1	Capacity		(kW)	6.0 < 1.6 - 6.5 >	8.0 < 2.7 - 9.4 >	9.3 < 2.5 - 10.6 >	10.6 < 3.0 - 11.6 >	16.0 < 4.2 - 19.0 >
		Power consumption		(kW)	1.45	2.16	2.42	3.12	4.57
		EER		(Btu/h.W)	14.19	12.64	13.25	11.61	11.93
Indoor unit specifications									
Outer dimension		Main unit	Height	mm(inch)	256 (10.1)	256 (10.1)	319 (12.6)	319 (12.6)	319 (12.6)
			Width	mm(inch)	840 (33.1)	840 (33.1)	840 (33.1)	840 (33.1)	840 (33.1)
			Depth	mm(inch)	840 (33.1)	840 (33.1)	840 (33.1)	840 (33.1)	840 (33.1)
		Ceiling panel (Sold separately)	Height	mm(inch)	30 (1.2)	30 (1.2)	30 (1.2)	30 (1.2)	30 (1.2)
			Width	mm(inch)	950 (37.4)	950 (37.4)	950 (37.4)	950 (37.4)	950 (37.4)
			Depth	mm(inch)	950 (37.4)	950 (37.4)	950 (37.4)	950 (37.4)	950 (37.4)
Ceiling panel (Sold separately)					Model : RBC-U31PGXP(W)-IN1				
Total weight		Main unit		(kg)	20.0		24.0		
		Ceiling panel (Sold		(kg)	4.2				
Fan					Turbo fan				
Standard air flow		H/M/L		(CFM)	618 / 512 / 460	720 / 565 / 480	1236 / 847 / 690	1265 / 880 / 720	1350 / 1090 / 880
Standard air flow		H/M/L		(m3/h)	1050 / 870 / 780	1230 / 960 / 810	2100 / 1440 / 1170	2150 / 1500 / 1260	2300 / 1840 / 1500
Sound pressure level		H/M/L		(dB)	37 / 36 / 34	40 / 37 / 36	46 / 42 / 37	47 / 43 / 39	49 / 45 / 43
Outdoor unit specifications									
Heat Exchanger					Cu-Al				
Outer dimension		Height		mm(inch)	550 (21.6)	630 (24.8)	890 (35.0)	890 (35.0)	1340 (52.7)
		Width		mm(inch)	780 (30.7)	800 (31.5)	900 (35.4)	900 (35.4)	900 (35.4)
		Depth		mm(inch)	290 (11.4)	300 (11.8)	320 (12.6)	320 (12.6)	320 (12.6)
Total weight		Main unit		(kg)	41.0	46.0	69.0	71.0	102.0
Pipe		Min. length		(m)	5	5	5	5	5
		Max. total length		(m)	35	35	35	35	50
Flare Connections		Gas side		mm(inch)	12.7 (1/2)	15.9 (5/8)	15.9 (5/8)	15.9 (5/8)	15.9 (5/8)
		Liquid side		mm(inch)	6.4 (1/4)	9.5 (3/8)	9.5 (3/8)	9.5 (3/8)	9.5 (3/8)
Refrigerant					R410A				
Sound pressure level		Cooling / Heating		(dB)	47 / 51	52 / 55	54 / 56	57 / 57	63 / 63
Operating Range		Cooling		(°C)	21 / 54				
		Heating		(°C)	-10 / 24				

T1 Rated conditions Cooling: Indoor air temperature @ 27°C DB / 19°C WB and outdoor air temperature @ 35°C DB
T3 Rated conditions Cooling: Indoor air temperature @ 29°C DB / 19°C WB and outdoor air temperature @ 46°C DB
H1 Rated conditions Heating : Indoor air temperature 20°C DB and Outdoor air temperature 7°C DB/6°C WB

Controls

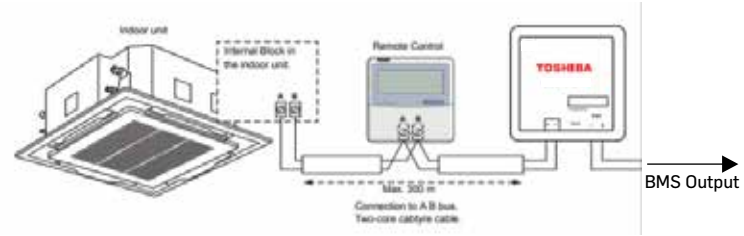
Optional Accessories

Connector No	Picture	Pin No	Specification	Application	RAV-SH***BP RAV-SH***BTP	RAV-SH***UP RAV-SH***UTP
TCB-KBCN32VEE		1	DC12 V	External Ventilation Fan Controls	YES	YES
		2	Output			
TCB-KBCN61HAE		1	Start / stop input	1. Hotel Key Card 2. Fire Panel Interlock 3. BMS/DDC/PLC Interlock - ON-OFF Command (Dry Contact) - RUN Output (12VDC) - Alarm Output (12VDC)	YES	YES
		2	0V(COM)			
		3	Prohibition Input			
		4	Operation output			
		5	DC12 V (COM)			
		6	Alarm output			
TCB-KBCN60OPE		1	DC12 V (COM)	BMS/DDC/PLC Interlock 1. Defrosting output (12VDC) 2. Thermostat ON output (12VDC) 3. Cooling output (12VDC) 4. Heating Output (12VDC) 5. Fan Output (12VDC)	YES	NO
		2	Defrosting output			
		3	Thermostat ON output			
		4	Cooling output			
		5	Heating output			
		6	Fan output			
TCB-PCUC2E		IN1	External Error Input	BMS/DDC/PLC Interlock	NO	YES
		IN2	Prohibition Input			
		AI1	Operation Input resistance			
		AI2	Setpoint input resistance			
		AI3	Fan speed Input resistance			
		K1	Configurable Output 1			
		K2	Configurable Output 2			
		K3	Configurable Output 3			
TCB-PCNT30TLE2			TCC-Link	TCB-PCNT30TLE TCC-Link network adaptor enables RAV systems to interface with central controllers and BMS systems.	YES	YES

Optional BMS Interface

LC Indoor units can be integrated with Building Management Systems using Optional BMS Interface.

1. BMS-IFMB0TLR-E - Modbus RTU (1:1) BMS Interface
2. BMS-IFKX0TLR-E KNX TP (1:1) BMS Interface



Compatibility

Model Number	RBC-AMT32E RBC-AMTU31-E	RBC-AMS41E	RBC-ASC11E RBC-ASC11UE	RBC-AMS55E-EN/ES RBC-AMSU51-EN/ES
BMS-IFKX0TLR-E	Yes	Yes	No	No
BMS-IFMB0TLR-E	Yes	Yes	No	No

NOTES

TOSHIBA