

TOSHIBA



TOSHIBA LIGHT COMMERCIAL SYSTEMS

Providing endless possibilities



WHY CHOOSE TOSHIBA AIR CONDITIONERS?

Being comfortable in your environment means much more than controlling the temperature. Toshiba air conditioners are designed for flexibility in application with low operating noise and improved air quality, and above all, reliability. So, you get all year-round comfort plus accurate temperature control.

FLEXIBLE RANGE

Whether you are looking to cool a small bedroom or a office boardroom, the range of Toshiba's residential air conditioning solutions are ideal for all areas of your home or office. From wall mounted split systems to inverter ducted systems or under ceiling systems, Toshiba has a wide variety of heating and cooling solutions to suit your requirements.

AFTER SALES SERVICE

Problems tend to happen when you least expect them. Our in-house technical support team is unlike any other and it's easy to know why.

You can count on our in-house technical support to assist you with anything you may need. We take this duty very seriously, so you can rest assured you will have dependable, ongoing support every time.

PEACE OF MIND

At Toshiba, we are confident our heat pumps can withstand any condition of New Zealand climate, which is why we offer a 5-year warranty across our entire range of air conditioning products, New Zealand-wide for all residential applications.

REDUCING GWP WITH R32

Our world is as precious as it is delicate, it's our responsibility to help take care of it.

Air conditioners circulate refrigerants to cool and heat air, recently some of these gases have been linked with environmental issues such as ozone depletion and climate change.

Choosing the right refrigerant requires consideration of all related issues and a holistic approach. It needs to be safe, but it also needs to be economical, efficient, and environmentally responsible.

R32 systems are more efficient as they require less refrigerant than R410a systems and because R32 is not mixed with other refrigerants, it can be recycled.

Using R32, we offer a better refrigerant combined with Toshiba's renowned high-level of performance and efficiency.

GWP = Global Warming Potential



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TOSHIBA'S TWIN ROTARY COMPRESSOR

Toshiba's Twin Rotary compressor brings outstanding performance without compromising on system reliability.

TWIN ROTARY COMPRESSOR

Our proprietary Toshiba Twin Rotary compressor and inverter provide optimum control for maximising performance efficiency. With a rotor in each compression chamber, Toshiba Twin Rotary compressor systems are compact, lightweight, and low vibration while requiring less space for installation.

DLC TREATMENT

Toshiba's Diamond Like Carbon coating technology is unique to Toshiba's compressors.

It covers the wear surfaces on compression vanes for outstanding hardness and wear resistance, enhancing both the compressor's performance and durability.



Large capacity



Wide operating range



DLC Treatment
[Diamond Like Carbon]

TOSHIBA TECHNOLOGY

PAM

Pulse Amplitude Modulation [PAM] is a technology that controls the current waveform so that it resembles the supply voltage wave, thereby reducing loss and realising more efficient use of electricity.

With a PAM inverter, the voltage delivered to the compressor could be increased as needed, resulting in increased rotation speed.

Using PAM control, 98% of the input power supply is used effectively.

PWM

Pulse Width Modulation [PWM] helps to balance the compressor speed revolution, either higher speed when providing fast cooling, or slow speed when maintaining room temperature resulting in significantly reduced consumption.

INVERTER CONTROL

The inverter component allows for the Toshiba outdoor unit to vary its speed and output to match the required capacity of the indoor unit. Thus, the unit can achieve 30% more operating efficiency than conventional models and therefore, is more economical to run.

COMMITTED TO DEVELOPMENT & COMFORT

ABSOLUTE COMFORT

Toshiba's commitment to society drives a company-wide focus on attention to details through every stage of the development process, from design to user field tests, installations using our products and systems therefore featuring higher standard of indoor air quality, sound levels and energy savings when compared to its predecessors.

DIGITAL INVERTER

GM SERIES

A full range of Toshiba R32 light commercial systems are now available with Digital Inverter combinations to suit an array of application types, whether it be for residential or commercial spaces.

The technology of the Digital Inverter control module ensures optimised reproduction of the supply sine wave at the desired frequency in order to reduce inefficient harmonics that inverters normally emit.

With this innovative control method, Toshiba's Digital Inverter brings state-of-the-art inverter technology to its light commercial range, offering considerable advantages from wide capacity range, energy efficiencies to optimised comfort.








COMPACT CHASSIS

Single fan outdoor units are available from 2.5kw through to 12.5kw with a compact height of less than 900mm, making them an ideal unit for commercial applications where space may be a constraint. Being compact also enables these units to be double stacked without compromising on performance.




DIGITAL INVERTER [DI] LINE-UP


DIGITAL INVERTER [DI]

							
SINGLE PHASE OUTDOOR	RAV-GM301ATP-A	RAV-GM401ATP-A	RAV-GM561ATP-A	RAV-GM801ATP-A	RAV-GM1101ATP-A	RAV-GM1401ATP-A	RAV-GM1601ATP-A
THREE PHASE OUTDOOR	-	-	-	-	-	-	-


COMPACT 4-WAY CASSETTE

	RAV-RM301MUT-E	RAV-RM401MUT-E	RAV-RM561MUT-E	N/A	N/A	N/A	N/A
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4-WAY CASSETTE

	N/A	N/A	RAV-GM561UTP-A	RAV-GM801UTP-A	RAV-GM1101UTP-A	RAV-GM1401UTP-A	RAV-GM1601UTP-A
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HIGH WALLS

	RAV-GM301KRTP-A	RAV-GM401KRTP-A	RAV-GM561KRTP-A	RAV-GM801KRTP-A	N/A	N/A	N/A
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MID-STATIC DUCTED

	N/A	N/A	RAV-GM561BTP-A	RAV-GM801BTP-A	RAV-GM1101BTP-A	RAV-GM1401BTP-A	RAV-GM1601BTP-A
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HIGH STATIC DUCTED

	N/A	N/A	RAV-GM561DTP-A	RAV-GM801DTP-A	RAV-GM1101DTP-A	RAV-GM1401DTP-A	RAV-GM1601DTP-A
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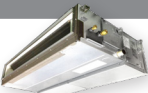
UNDER CEILING

	N/A	N/A	RAV-GM561CTP-A	RAV-GM801CTP-A	RAV-GM1101CTP-A	RAV-GM1401CTP-A	RAV-GM1601CTP-A
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DIGITAL INVERTER [DI]

		
THREE PHASE OUTDOOR	RAV-GM2241AT8-A	RAV-GM2801AT8-A

HIGH STATIC DUCTED

	RAV-RM2241DTP-E2	RAV-RM2801DTP-E2
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SUPER DIGITAL INVERTER

GP SERIES

The expectations of a modern air conditioning system have evolved over the past years. Today, advanced comfort goes hand in hand with reduced energy and maintenance costs, combined with maximised simplicity and true operational flexibility.

The Super Digital Inverter associates all of Toshiba's innovative spirit and outstanding expertise to create highly efficient solutions with maximum end user comfort at its core.

Toshiba Super Digital air conditioners combine economy and ecology in a compact body. They feature Toshiba's state-of-the-art technology, flexible control, and easy installation to bring natural comfort and convenience to any home or business environment.

PIPING FLEXIBILITY

Toshiba's Super Digital Inverter series supports height differences of up to 30 meters on a single system, which is enough height to cover an 8 storey building.

The SDI series also boasts up to 75 meters of allowable pipe run, increasing installation flexibility, making it possible to use in just about any application.

630mm



RAV-GP561 - 5.6kW

890mm



RAV-GP801 - 8.0kW

1340mm



RAV-GP1101 - 11.2kW

RAV-GP1401 - 14.0kW

RAV-GP1601 - 16.0kW

ECO-DRIVING DC TWIN ROTARY

High efficiency heat-transfer

Heat-transfer tube with improved heat-transfer coefficient.

DC fan motor

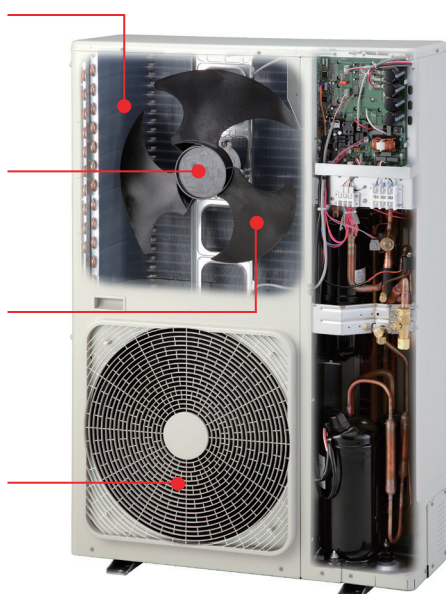
Highly efficient DC Motor.

Bat wing fan

Newly development for high-pressure low-volume fan.

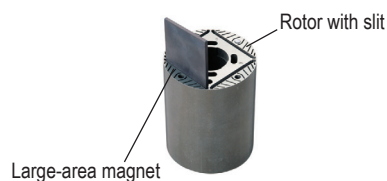
Wide-flow grille

Optimising ventilation performance, bringing out the full effect of fan and motor.



PIPING FLEXIBILITY

A low minimum speed of 10 rps has been achieved. This has further improved the operating efficiency when the load is low.



The structure and shape of each compressor component has been optimised. The area of the rotor magnet has been increased and a slit introduced to the design. These improvements have further enhanced efficiency and reduced noise.

SUPER DIGITAL INVERTER [SDI]

SINGLE PHASE OUTDOOR	RAV-GP561ATP-A	RAV-GP801ATP-A	RAV-GP1101ATP-A	RAV-GP1401ATP-A	RAV-GP1601ATP-A
THREE PHASE OUTDOOR	-	-	RAV-GP1101AT8P-A	RAV-GP1401AT8P-A	RAV-GP1601AT8P-A

4-WAY CASSETTE

	RAV-GM561UTP-A	RAV-GM801UTP-A	RAV-GM1101UTP-A	RAV-GM1401UTP-A	RAV-GM1601UTP-A
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HIGH WALLS

	RAV-GM561KRTP-A	RAV-GM801KRTP-A	N/A	N/A	N/A
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MID-STATIC DUCTED

	RAV-GM561BTP-A	RAV-GM801BTP-A	RAV-GM1101BTP-A	RAV-GM1401BTP-A	RAV-GM1601BTP-A
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HIGH STATIC DUCTED

	RAV-GM561DTP-A	RAV-GM801DTP-A	RAV-GM1101DTP-A	RAV-GM1401DTP-A	RAV-GM1601DTP-A
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UNDER CEILING

	RAV-GM561CTP-A	RAV-GM801CTP-A	RAV-GM1101CTP-A	RAV-GM1401CTP-A	RAV-GM1601CTP-A
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COMPACT 4-WAY CASSETTE

PERFECT FOR GRID SYSTEM CEILING

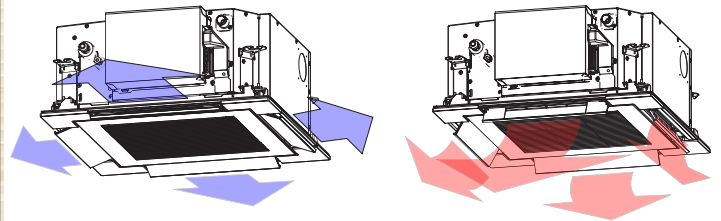
This compact unit (575 x 575 mm) fits perfectly into ceilings and matches standard architectural modules, without the need to cut ceiling tiles.

COMFORT

Individual louver control enables airflow to be chosen according to user preferences. The angles of each louver can be set individually in 3 different choices of swing patterns; Standard swing, Diagonally opposite swing and Turn-around swing

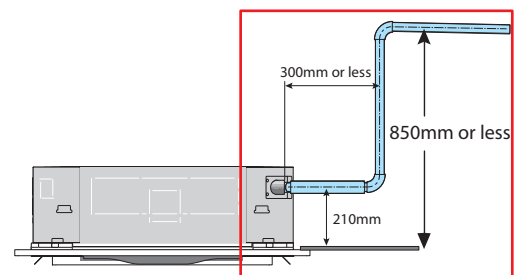
EASE OF INSTALLATION & MAINTENANCE

The slim flat stylish panel design is only 270 mm in height even when an electrical box is located inside the unit. Easy access to electrical box is achieved by simply removing the suction grill.



BUILT-IN CONDENSATE DRAIN PUMP

Equipped with a built-in drain pump with a pressure lift of 850mm, increasing flexibility and installation speed.



SELF CLEAN MODE

The unit dries internally by running on FAN operation once normal cycle has ceased, allowing the unit to be kept clean and reducing the built up of allergens, dust and odours.

COMPACT 4-WAY CASSETTE SPECIFICATIONS

INDOOR UNIT		RAV-RM301MUT-E	RAV-RM401MUT-E	RAV-RM561MUT-E
OUTDOOR UNIT		RAV-GM301ATP-A	RAV-GM401ATP-A	RAV-GM561ATP-A
Cooling Capacity Range	kW	2.50 [0.90 - 3.00]	3.60 [0.90 - 4.00]	5.00 [1.50 - 5.60]
Heating Capacity Range	kW	3.40 [0.80 - 4.50]	4.00 [0.80 - 5.00]	5.30 [1.50 - 6.30]
EER		4.24	4.00	3.23
COP		4.47	4.00	5.30
Maximum Operating Current	A	7.90	9.20	15.50
Dimensions - Indoor [H x W x D]		256 x 575 x 575	256 x 575 x 575	256 x 575 x 575
Dimensions - Outdoor [H x W x D]	mm	550 x 780 x 290	550 x 780 x 290	550 x 780 x 290
Dimensions - Panel [H x W x D]		12 x 620 x 620	12 x 620 x 620	12 x 620 x 620
Weight - Indoor / Outdoor / Panel	kg	15 / 29 / 2.5	15 / 34 / 2.5	15 / 40 / 2.5
Airflow [H / M / L]	l/s	177 / 144 / 122	183 / 169 / 153	221 / 186 / 151
Sound Pressure Level Indoor / Outdoor	dB(A)	38 / 47	41 / 50	44 / 48
Operating Range Cooling	°C db	-15 to 46	-15 to 46	-15 to 46
Operating Range Heating		-15 to 15	-15 to 15	-15 to 15
Pipe Sizes (Liquid / Gas)	mm	6.35 / 9.52	6.35 / 12.70	6.35 / 12.70
Maximum Pipe Length / Lift	m	20 / 10	20 / 10	30 / 30
Maximum Pre-charged Length		15	15	20
Power Supply	Ph / V / Hz	1ph / 220-240V / 50Hz	1ph / 220-240V / 50Hz	1ph / 220-240V / 50Hz

Refer to the Engineering Databook for details on these conditions and requirements.

Rate conditions: Cooling: Indoor 27 °C Dry Bulb / 19 °C Wet Bulb, Outdoor 35 °C Dry Bulb.
Heating: Indoor 20 °C Dry Bulb, Outdoor 7 °C Dry Bulb / 6 °C Wet Bulb.
Base on equivalent piping length of 7.5m and piping height difference of 0m.

CONTROLS OPTIONS



BACKLIT WIRED CONTROLLER

RBC-AMSU51-ES

The ultimate in local controller with built-in 7-day timer, large screen and easy to use menu.

FUNCTIONS:

- On / Off
- Schedule timer
- Holiday mode
- Dual set point
- Energy saving operation
- Night operation (only with models equipped with the function)
- Temperature increments of 0.5°C
- Fault Coder



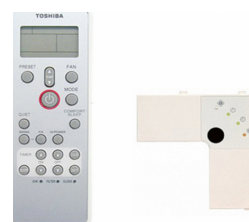
COMPACT WIRED CONTROLLER

RBC-ASC11E / RBC-ASCU11-E

Back to basics with this remote controller offering all the standard functionalities with compact dimensions and a large screen.

FUNCTIONS:

- On / Off
- Operation mode
- Temperature setting
- Fan speed
- Louvres
- Fault codes
- Unit setup



WIRELESS CONTROLLER KIT

RBC-AXU31UM-E

The wireless infra-red remote controller kit features an easy to use and compact button layout along with standard control buttons.

FUNCTIONS:

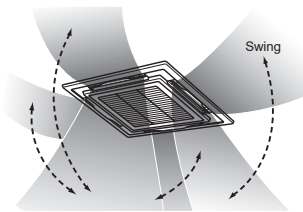
- On / Off
- Operation mode
- Temperature setting
- Fan speed
- Louvres

4-WAY CASSETTE

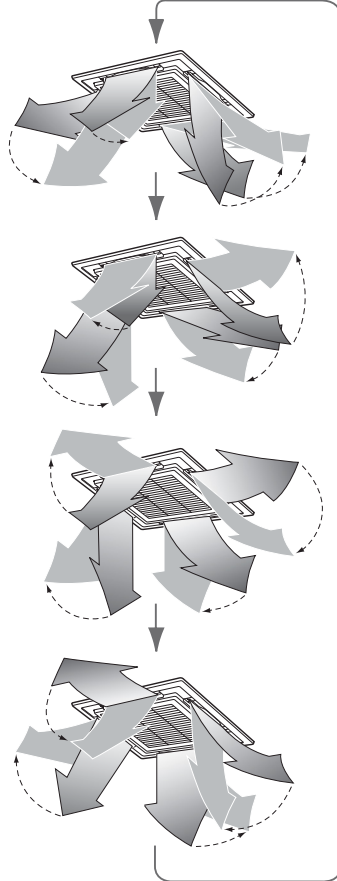
SMART AIRFLOW

Individual louver control enables airflow to be chosen according to user preferences. The angles of each louver can be set individually in 3 different choices of swing patterns; Standard swing, Dual swing and Cyclic swing.

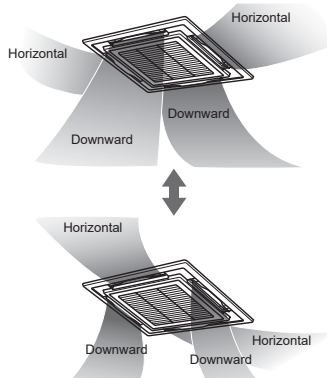
STANDARD SWING



CYCLIC SWING

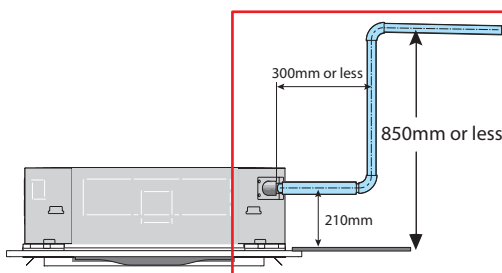


DUAL SWING



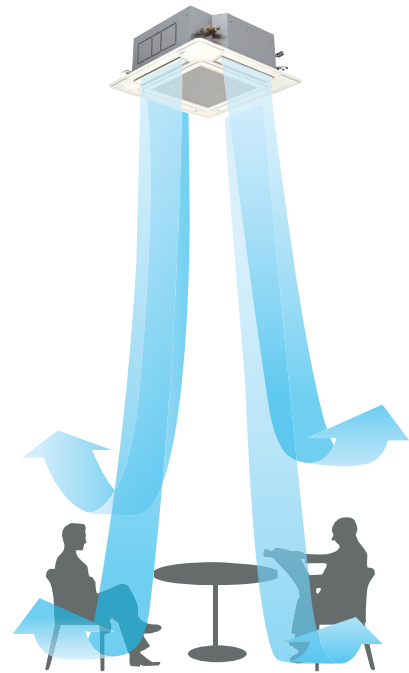
BUILT-IN CONDENSATE DRAIN PUMP

Equipped with a built-in drain pump with a pressure lift of 850mm, increasing flexibility and installation speed.



STANDARD TO HIGH CEILING APPLICATIONS

Toshiba 4-Way Cassettes are designed for standard to high ceiling applications.



POWER SAVING

Set limits that restrict power consumption and reduce power bills.

Power consumption is given first priority, and limits maximum power consumption of the unit.

SELF CLEAN MODE

The unit dries internally by running on FAN operation once normal cycle has ceased, allowing the unit to be kept clean and reducing the built up of allergens, dust and odours.