

TOSHIBA



MiNi-SMMS 

High Ambient Application
50/60 Hz





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

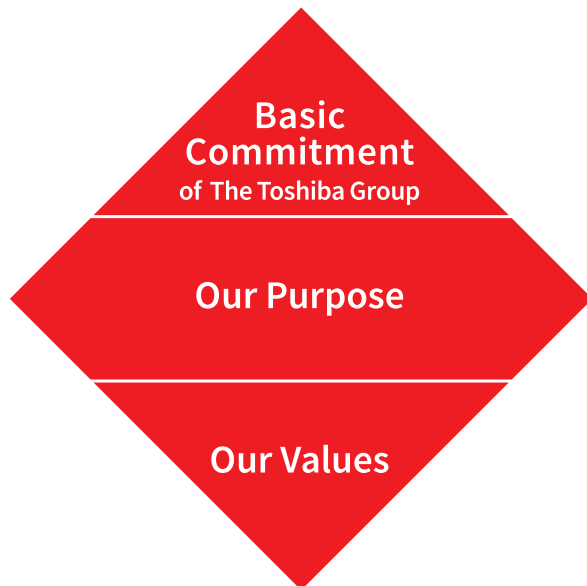
Toshiba Air Conditioning has research and development centers across Japan, Europe, Thailand and China. Its global research activities are managed and integrated to ensure all research sites collaborate to provide innovative solutions to customers across the world. The Toshiba brand holds more than 1200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

THE ESSENCE OF TOSHIBA

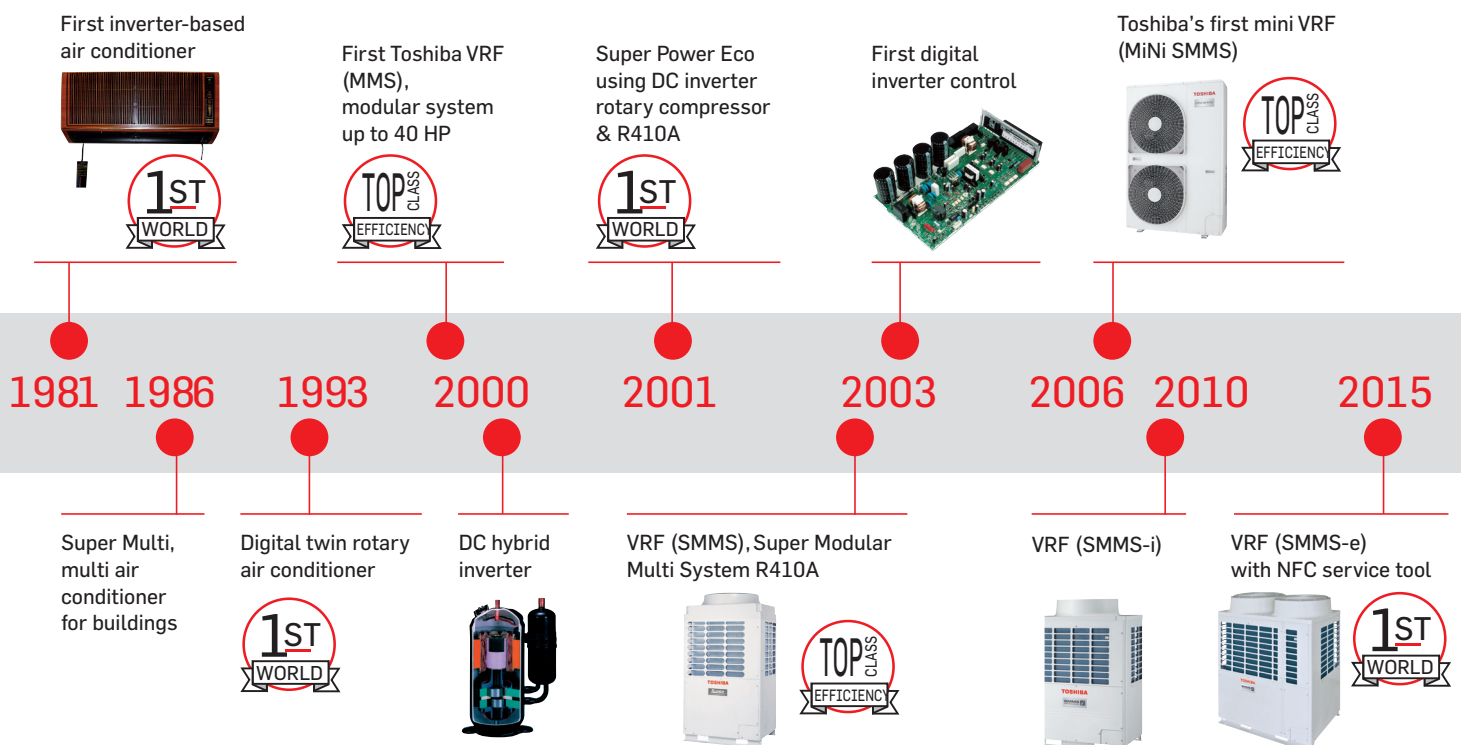
> Basic Commitment of the Toshiba Group



Committed to People,
Committed to the Future.

At Toshiba, we commit to raising the
quality of life for people around the
world, ensuring progress that is in
harmony with our planet.

> ALWAYS ONE STEP AHEAD



> Our Purpose

We are Toshiba. We have an unwavering drive to make and do things that lead to a better world.

A planet that's safer and cleaner. A society that's both sustainable and dynamic. A life as comfortable as it is exciting. That's the future we believe in. We see its possibilities, and work every day to deliver answers that will bring a brilliant new day, every day.

By combining the power of invention with our expertise and desire for a better world, we imagine things that have never been – and make them a reality.

That is our potential. Working together, we inspire a belief in each other and in our customers, that no challenge is too great, and there's no promise we can't fulfill.

We turn on the promise of a new day.

> Our Values

Do the right thing
Look for a better way

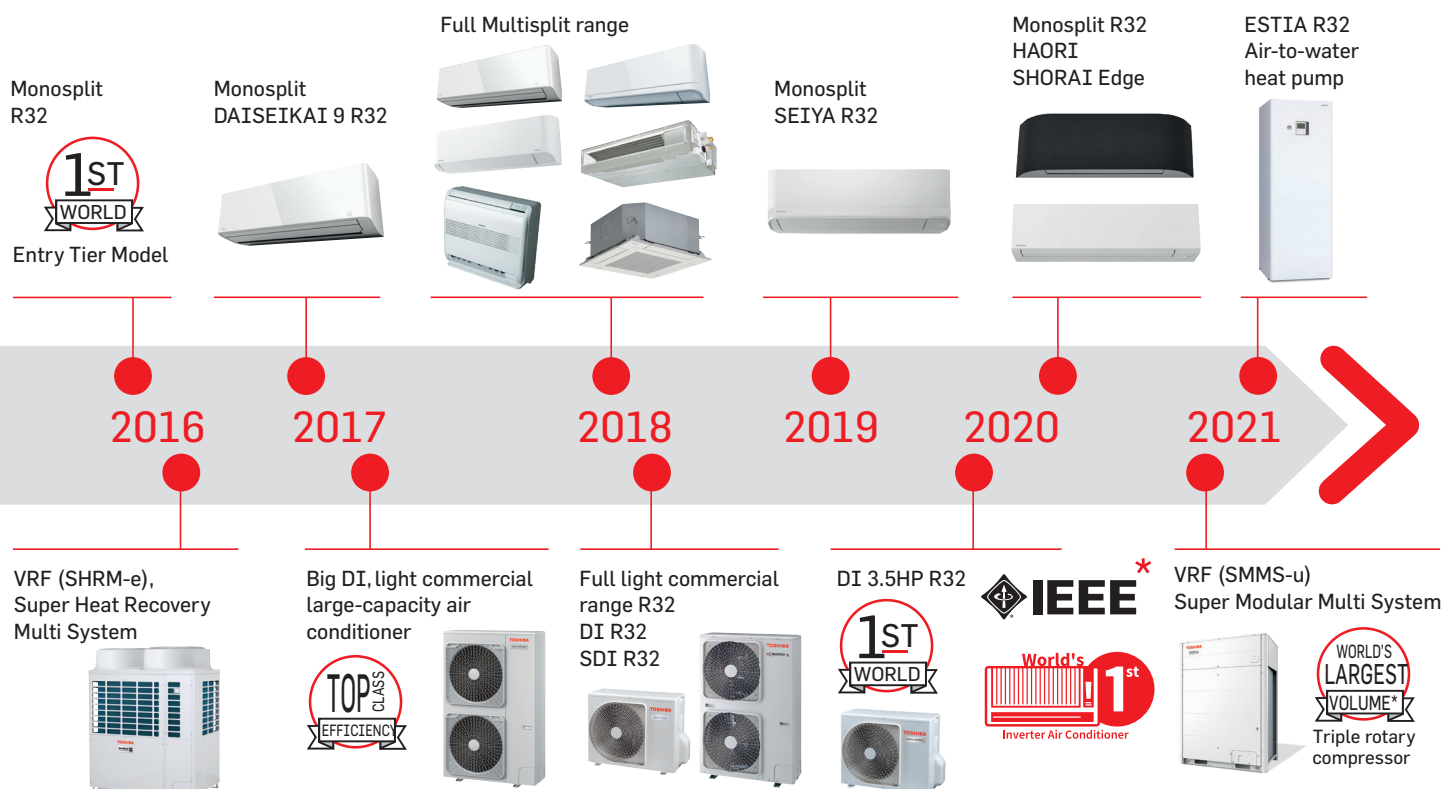
We act with integrity, honesty and openness, doing what's right - not what's easy. We continually strive to find new and better ways, embracing change as a means of progress.

Always consider the impact

We think about how what we do will change the world for the better, both today and for generations to come.

Create together

We collaborate with each other and our customers, so that we can grow together.



* 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.

LEADING THE WAY TO EXCELLENCE

Toshiba Air Conditioning's strengths centre on in-house research, development of advanced technologies and core components. These marketing leading technologies, industry leading research and

high quality components are then used to offer best in class products to our customers that ensure optimum comfort at reduced operating costs.

> A global innovation network

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> Products designed to perform, engineered to perfection

In 1981 Toshiba Air Conditioning was the first company to incorporate inverter technology into air conditioning systems and has maintained its technological advantage over its competitors ever since. The development of the new and exclusive DC hybrid inverter system has reaffirmed this ability to innovate and maintain technological leadership in a fast-growing market. But for Toshiba Air Conditioning, innovation also means strong commitment to international institutions that carefully evaluate the impact of new technologies on the environment.

Toshiba Air Conditioning combines technological development with consideration for future generations resulting in a range of extremely energy-efficient air conditioners, reducing greenhouse gas emissions at their source. Its continuous research into the development of inverter technology has provided remarkable results, both with regards to meeting the required comfort levels and continually reducing the system's energy consumption.



Quality production



Outdoor units production



Indoor units production

> Committed to the Future

Going further than just products and beyond their basic functions, to create reliable and safe solutions that can interact with each other and with users.

Incorporating Toshiba's technical building management systems, the world is made simpler, clearer and more effective.



Mini-SMMS-e

The Mini-SMMS-e system has been developed to achieve the best performance in a wide variety of commercial applications including shops, offices and large apartments, where unobtrusive appearance and quiet operation are important advantages.

In addition to the ease of installation associated with the Mini-SMMS-e, extraordinary flexibility is guaranteed by the comprehensive range to compatible indoor units (up to 14 models).

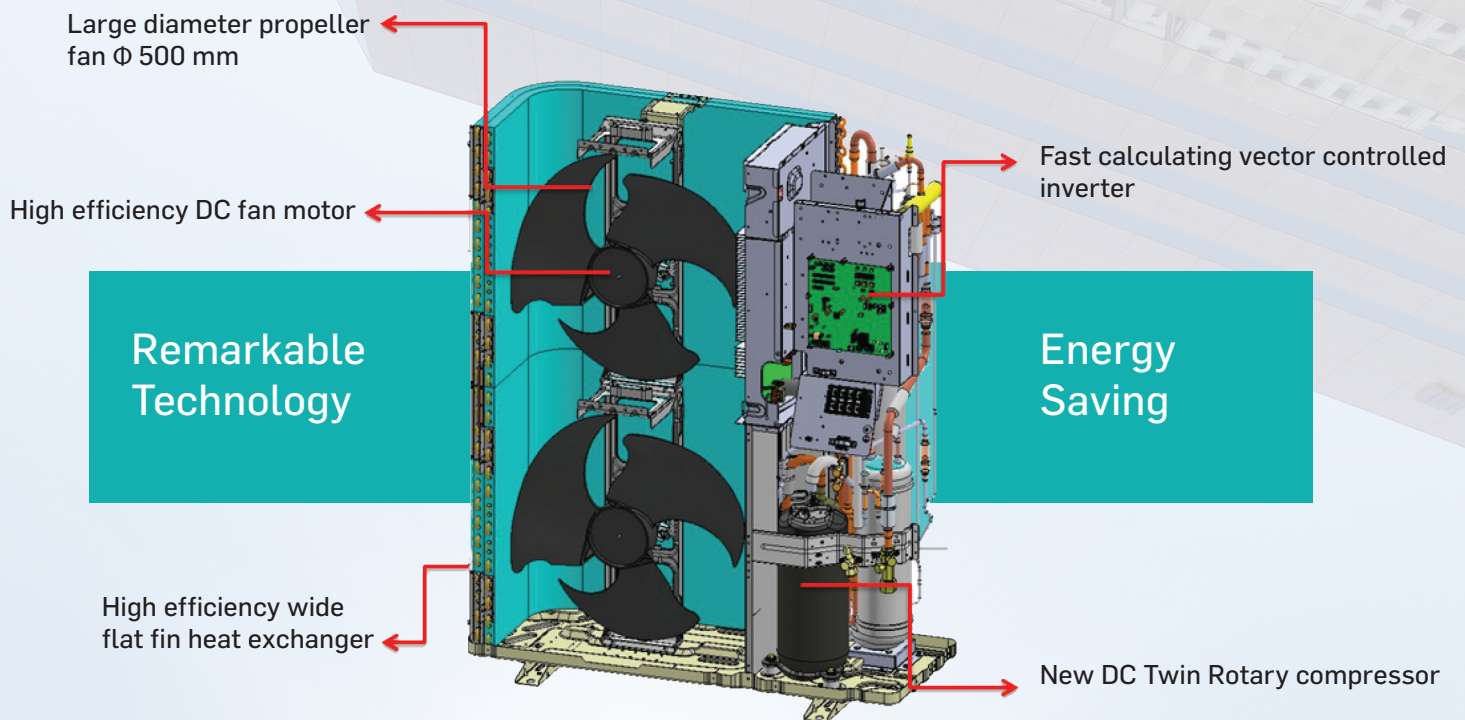
Key features

- The mini SMMS-e represents state-of-art technology, energy efficiency and cost savings.
- Wide range: up to 12 indoor units may be connected with a single outdoor unit.
- DC Twin Rotary compressor delivers high efficiency and complete reliability.
- Full SMMS-e control options available.
- The compact design of the outdoor unit (smaller overall than standard VRF unit) means it can be easily installed virtually anywhere; including on a balcony.

Mini-SMMS-e meets more customer's requirement

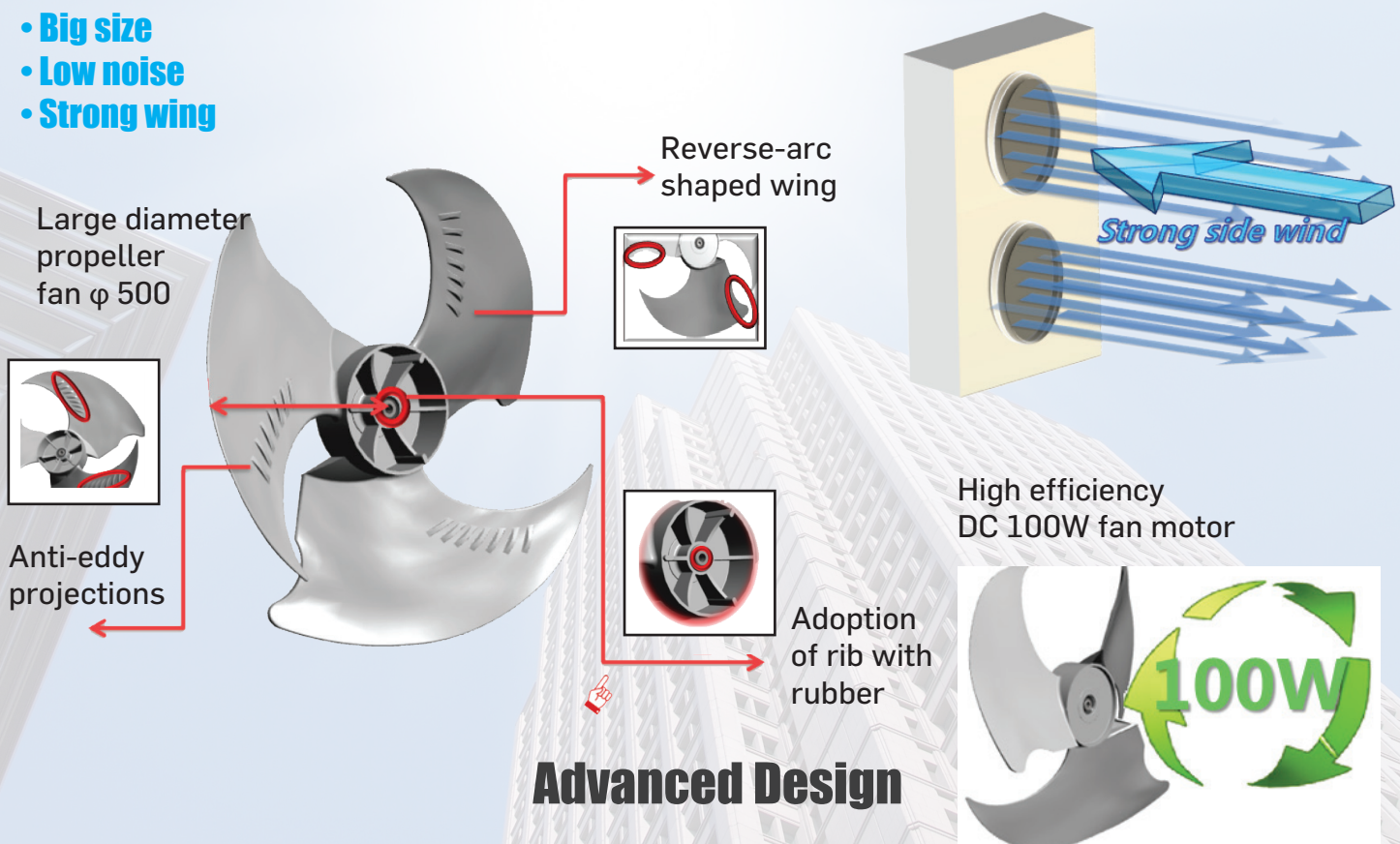


Mini-SMMS-e Technology



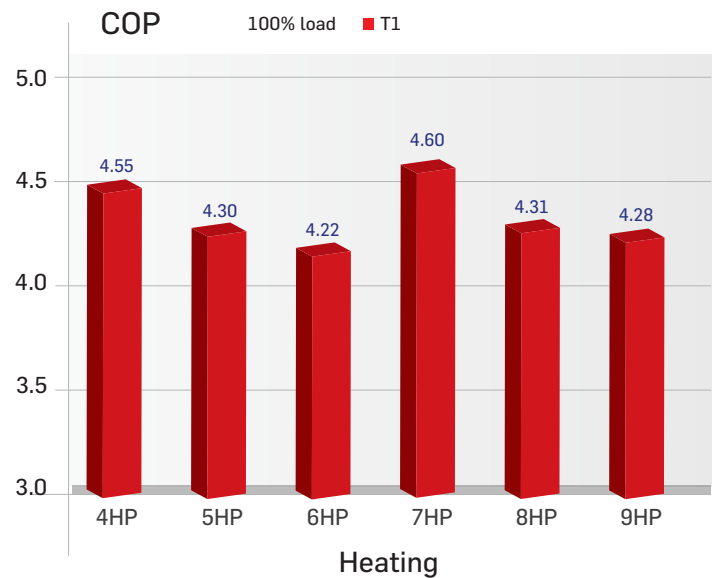
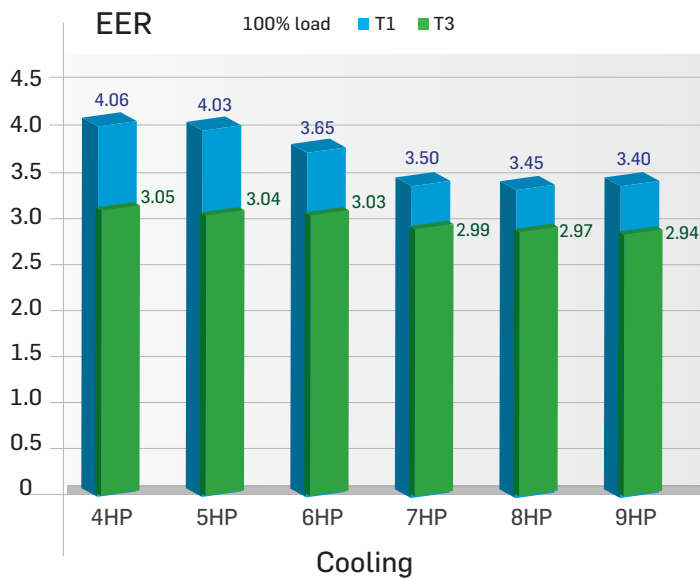
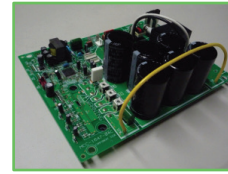
Large-Diameter Propeller Fan

- Big size
- Low noise
- Strong wing



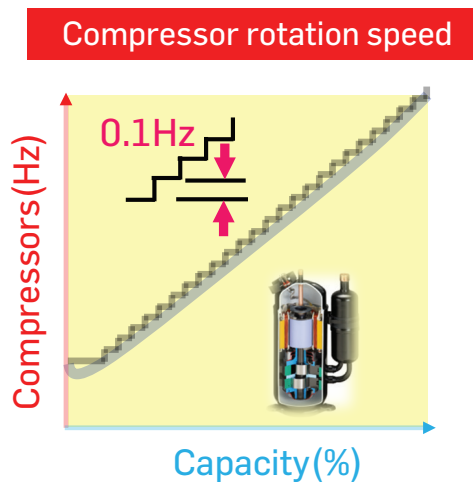
High energy savings

Adopting the highly efficient new DC twin- rotary compressors and variable refrigerant pressure controlled inverter realized greater energy efficient performance.

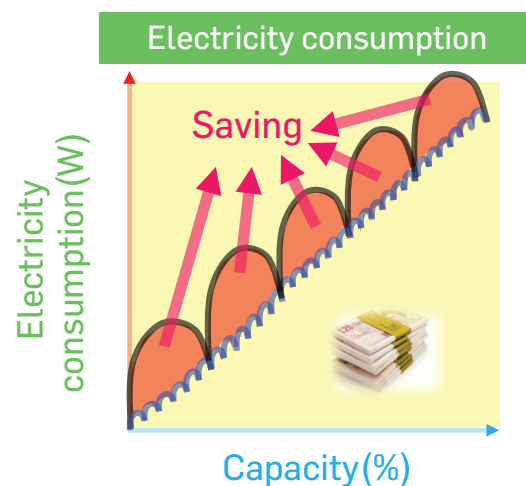


Ultra-precise 0.1 Hz Infinity Variable Control

Adopting new compressor which adjusts infinity variable control reduce "Electricity consumption"



Near-seamless 0.1 Hz steps
Fine control minimizes energy loss when changing frequencies.

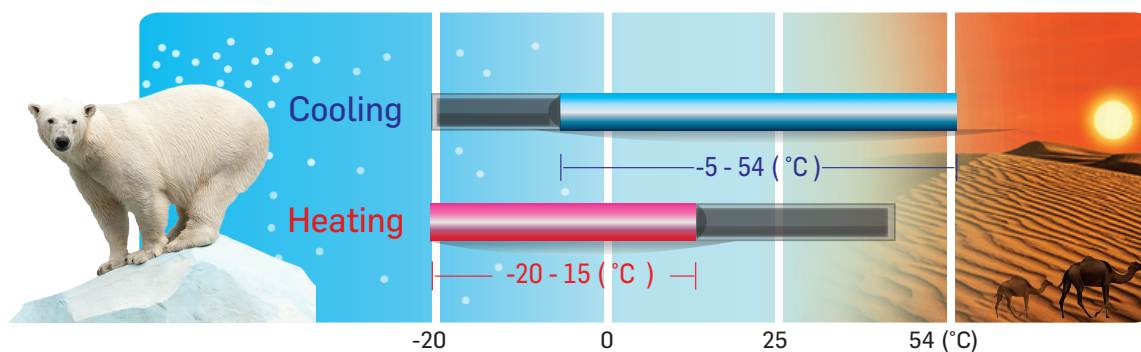


Compressor steps less,
Electricity consumption decrease as well.

Operating Temperature

The combination of advanced compressor design and system controls make the MiNi SMMS wide temperature operating range.

(Cooling : CDB, Heating : CWB)



Wide ambient temperature operating range

Comfort Operation with Low Sound

The night time operation mode ensures sound and disturbance free sleep. Sound level can be reduced by adjusting the compressor and fan speeds.

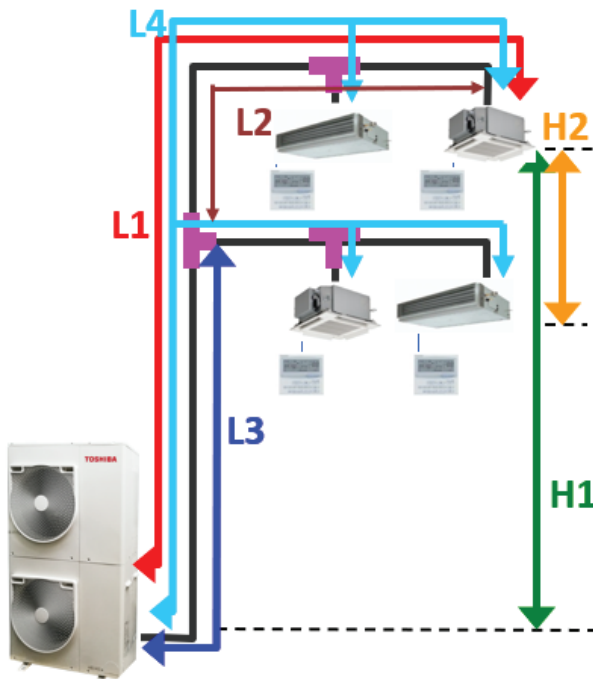
Sound pressure	Normal operation		Night time operation
4HP	Cooling	49	46
	Heating	52	48
5HP	Cooling	50	46
	Heating	53	48
6HP	Cooling	51	47
	Heating	54	49
7HP	Cooling	57	50
	Heating	58	50
8HP	Cooling	58	50
	Heating	59	50
9HP	Cooling	59	50
	Heating	60	50



*The optional PC board:TCB-PCM04E should be mounted in outdoor unit for sound reduction during night time.

Flexible Design and Easy Installation

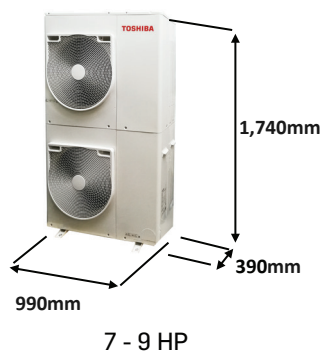
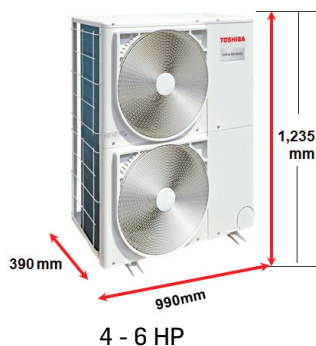
Mini-SMMS-e Piping Length



		HP	4 to 6	7 to 9
L1	Max. length from CDU to FCU (Real length)		100 m	120 m
L2	Max. length from 1st branch to the furthest FCU		35 m	40 m
L3	Max. main pipe length		65 m	80 m
L4	Max. total pipe length		180 m	300 m
H1	Max height between CDU and FCU (CDU above/below)		30/20 m	50/30 m
H2	Max height between FCU to FCU		15 m	15 m

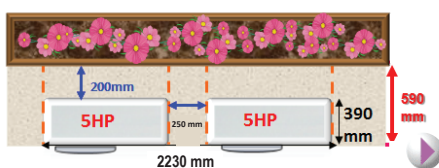
Easy installation

It is possible to install the unit promptly and reduce both time and cost for installation.

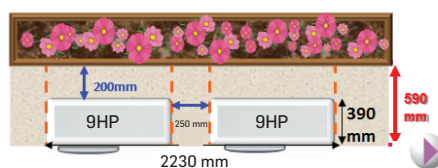


Install easily even without a crane truck

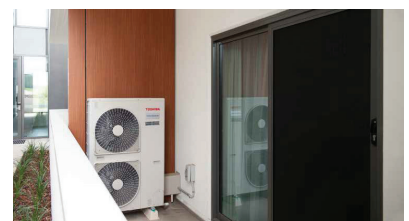
Mini-SMMS-e can easily fit on your balcony, narrow street and other limited spaces.



Mini-SMMS-e

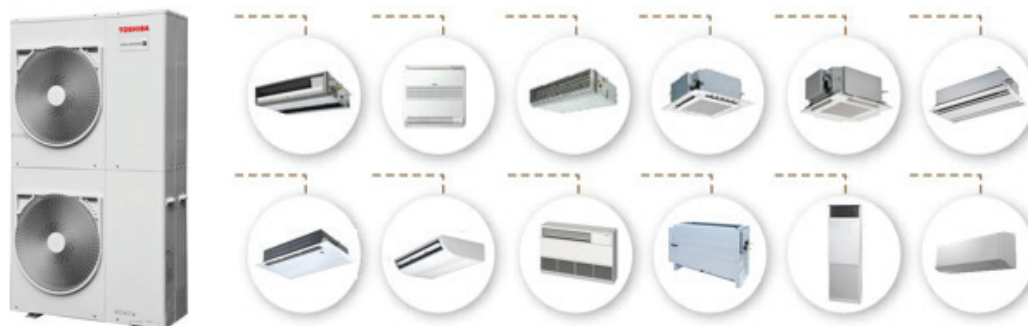


Mini-SMMS-e



User Friendly

Wide Indoor unit lineup

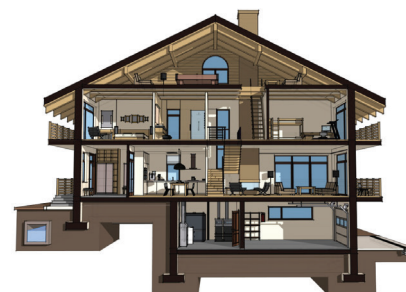


Wide range* of indoor units can be connected!

With several types of indoor units to choose from, our line-up includes combinations that are capable of air conditioning up to 12 rooms.

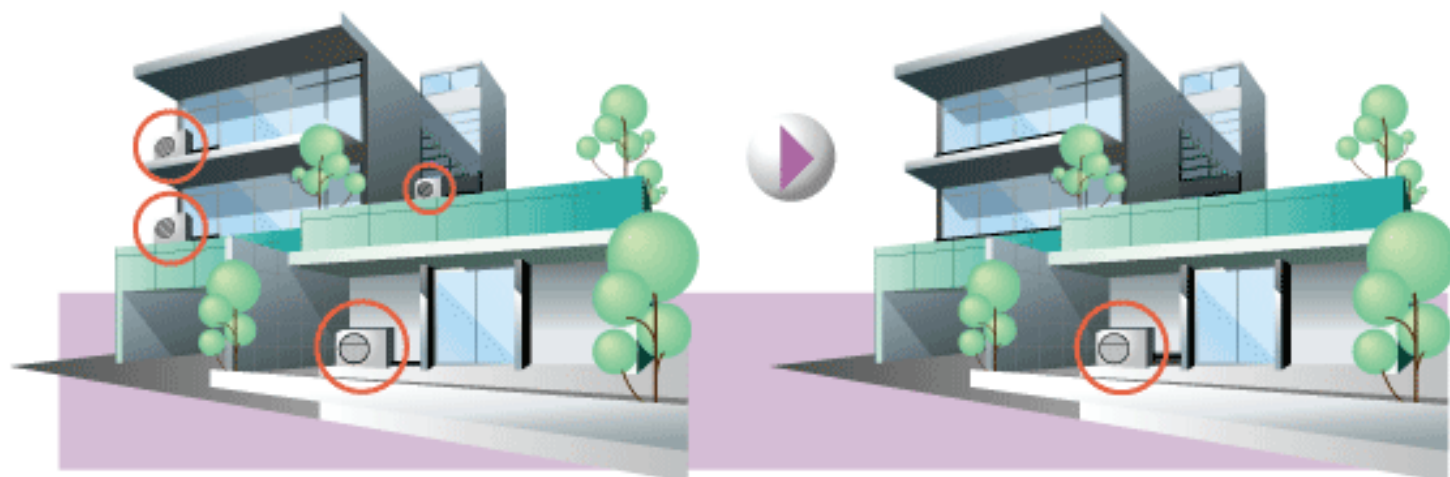
Our wide range ensures that our clients can always find a the right unit and indoor outdoor combination to suit their requirement.

A neat, aesthetic and well organized indoor space also helps in increasing the value of the client' property.



Outdoor Space Saving

Toshiba Mini-SMMS-e outdoors units are light weight and compact. With only one outdoor unit, the noise is significantly reduced, it takes up much less space and keeps the environment neat and peaceful.



Multiple designs..... Complete solution

Room temperature goes state-of-the-art, when delivered by Mini SMMS-e. Be it a pleasing coolness in the height of summer or the cosy warmth in the chill of winter. Mini SMMS-e creates a perfect environment that's conducive to people's inherent wellbeing. Regardless if the installation is in a busy shop, office or a tranquil country spa hotel, no other manufacturer offers such an extensive range of indoor units that can adjust and meet the most diverse of requirements. Consistently and creatively putting you where you need to be – in your comfort zone!

Indoor lineup

Type	kW HP	Cooling capacity														
		1.7 0.6	2.2 0.8	2.8 1.0	3.6 1.25	4.5 1.7	5.6 2.0	7.1 2.5	8.0 3.0	9.0 3.2	11.2 4.0	14.0 5.0	16.0 6.0	22.4 8.0	28.0 10.0	
4-way smart cassette type																
4-way cassette type																
Compact 4-way cassette type 620 x 620																
2-way cassette type																
1-way cassette type																
Standard duct type																
High static pressure type																
Slim duct type																
Ceiling type																
Hi wall type - upto 10kw																
Floor standing type																
Console type																
Floor standing cabinet type																
Floor standing concealed console type																

Upping the comfort levels by getting the controls right

Comfort, economic efficiency and safety can be further maximised with modern control mechanisms. Whether wired or remotely controlled units, Web-based control devices or elegant touch screen systems, the important thing is to achieve the right temperature at the right time and at the right place! It's all about balance – and we've got it just right.

WIRED REMOTE CONTROLS

Compact Remote Controller
RBC-ASC11-E
RBC-ASCU11-E



Remote Controller with weekly timer
RBC-AMS41E
RBC-AMS41E-ME (ESMA compliance)



Lite-Vision Plus
RBC-AMS55E-EN/ES
RBC-AMSU51-EN/ES



Central remote controller
TCB-SC640U-E
TCB-SC640U-ME (ESMA compliance)



Remote controller
RBC-AMTU31-E



Central remote controller
BMS-IWF0320E



Touch smart controller
BMS-CT2560U-E



Touch Screen controller
BMS-CT5121E



WIRELESS REMOTE CONTROLS

Infrared Remote Control



Receiver kit for the installation
on the wall or ceiling.
RBC-AXU31-E (All other Indoor units)



Receiver kit to be installed directly
in the frame of the indoor unit.
RBC-AXU31C-E (Ceiling and 1 way cassette)



Receiver kit to be installed directly
in the frame of the indoor unit.
RBC-AXU31U-E (4 way cassettes)



Receiver kit to be installed directly
in the frame of the indoor unit.
RBC-AXU31UM-E - Wireless Remote Controller
Kit for Compact 4-Way Cassette



Receiver kit for 1 way cassette
in the frame of the indoor unit.
RBC AX 33UYP-E



Receiver kit to be installed directly
in the frame of the indoor unit.
RBC-AXU31UW-E (2 way cassettes)



CONNECTABLE OPEN NETWORK

BACnet®
BMS-IFBN1280U-E



LonWORKS®
TCB-IFLN642TLE



Modbus®
TCB-IFMB1280U-E



KNX®
TO-AC-KNX-64



Technical specifications

Model No.			MCY-MHP0404HS8-ME	MCY-MHP0504HS8-ME	MCY-MHP0604HS8-ME	MCY-MHP0706HS8-ME	MCY-MHP0806HS8-ME	MCY-MHP0906HS8-ME
Outdoor Unit type			Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
Power Supply		V-Ph-Hz	380-415-3-50/380-415-3-60	380-415-3-50/380-415-3-60	380-415-3-50/380-415-3-60	380-415-3-50/380-415-3-60	380-415-3-50/380-415-3-60	380-415-3-50/380-415-3-60
T1	Cooling Capacity*	kW	12.60	14.06	15.53	19.90	22.30	24.90
	Power Consumption	kW	3.10	3.47	4.25	5.69	6.47	7.33
	EER		4.06	4.05	3.65	3.50	3.45	3.40
H1	Heating Capacity*	kW	14.20	16.0	18.0	19.90	22.30	24.90
	Power Consumption	kW	3.12	3.72	4.28	4.33	5.17	5.82
	COP		4.55	4.30	4.22	4.60	4.31	4.28
T3	Cooling Capacity*	kW	11.43	12.60	14.06	18.0	20.20	22.60
	Power Consumption	kW	3.74	4.15	4.62	6.03	6.80	7.70
	EER		3.05	3.04	3.04	2.99	2.97	2.94
Starting Current			Soft Start	Soft Start	Soft Start	Soft Start	Soft Start	Soft Start
Dimension (Height*Width*Depth)		mm	1235*990*390	1235*990*390	1235*990*390	1740*990*390	1740*990*390	1740*990*390
Unit Weight		kg	124	124	124	144	144	144
Compressor Type			Hermetic Twin rotary	Hermetic Twin rotary	Hermetic Twin rotary	Hermetic Twin rotary	Hermetic Twin rotary	Hermetic Twin rotary
Refrigerant Type(Quantity)		kg	R-410 A(6.4)	R-410 A(6.4)	R-410 A(6.4)	R-410 A(4.4)	R-410 A(4.4)	R-410 A(4.4)
Max. No. of connected indoor units			6	8	9	12	12	12
Sound pressure Level(Cooling)		dB(A)	49	50	51	57	58	59
Sound pressure Level(Heating)		dB(A)	52	53	54	58	59	60
Refrigerant Piping (Gas side / Liquid Side)		mm	15.9/9.5	15.9/9.5	19.1/9.5	19.05/9.5	19.05/9.5	22.22/9.5
Operation Temp range (Cooling)		°C	-5 to 54 °C	-5 to 54 °C	-5 to 54 °C	-5 to 54 °C	-5 to 54 °C	-5 to 54 °C
Operation Temp range (Heating)		°C	-20 to 15 °C	-20 to 15 °C	-20 to 15 °C	-20 to 15 °C	-20 to 15 °C	-20 to 15 °C

Note:

* Rated conditions

(T1) 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.
The standard pipe means that equivalent piping length of 7.5 m and standard 0 m piping height difference.

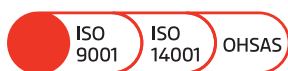
(H1) Heating : Indoor 20°C Dry Bulb, Outdoor 7°C Dry Bulb / 6°C Wet Bulb.

(T3) Cooling: Indoor 29°C dry bulb/ 19°C wet bulb, Outdoor 46°C dry bulb.

The standard pipe means that equivalent piping length of 7.5 m and standard 0 m piping height difference

Protection devices: Discharge temp. sensor, Suction temp. sensor, High pressure sensor, Low pressure sensor, Compressor case thermostat, PC fuse board.

TOSHIBA



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.