

TOSHIBA

SMMS ∞

SUPER MODULAR MULTI SYSTEM

—
Customized for efficiency.
Customized to help you ace.



 Better Air Solutions

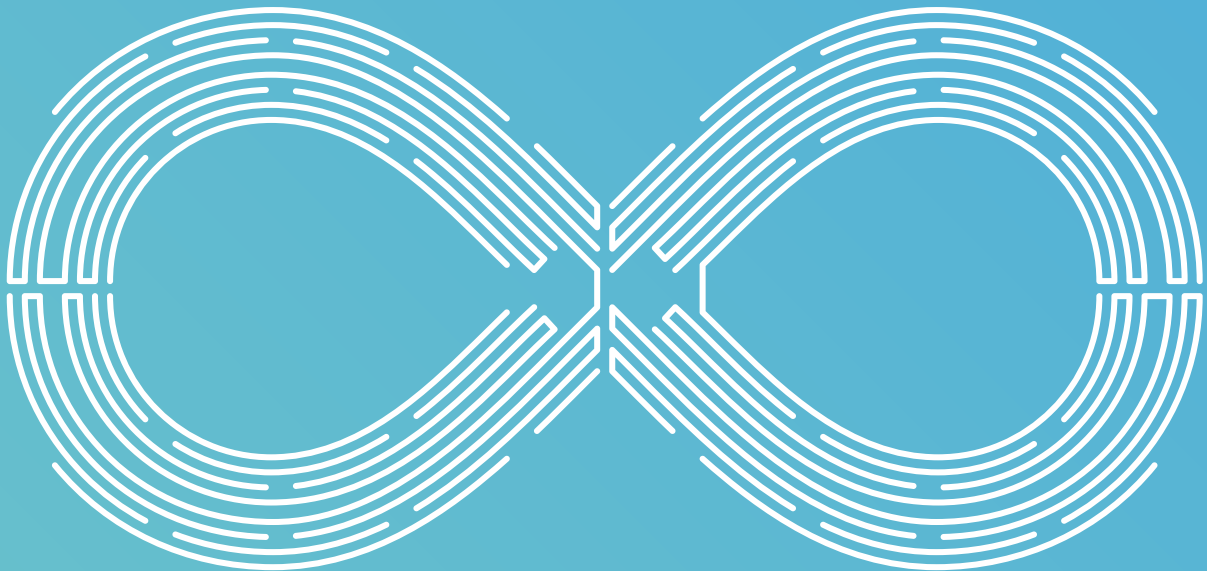
EXPERIENCE THE FUTURE

Customized for efficiency.
Customized to help you ace.

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 maximized simplicity and true operational flexibility. SMMS[∞] associates all of Toshiba innovative spirit and outstanding expertise to create highly efficient solution which can be customized as per the customers requirement and deliver optimum efficiency.

SMMS[∞]
SUPER MODULAR MULTI SYSTEM

Efficiency
Flexibility
Serviceability



Benefits for consultants

SMMS[∞] offers unlimited possibilities in terms of capacity, connectivity, indoor unit lineup and control solutions, providing the correct solution for your customers needs. Toshiba's intuitive selection tool will guide you through the selection process with minimal input from your side, ensuring trouble-free installation and operation.



Benefits for users

There is nothing like a comfortable place to enjoy the present moment. Full of Toshiba innovations, the new SMMS[∞] guarantees all year round comfort combined with superior energy management, advanced air filtration and full control solutions for maximized product usability.



Benefits for installers

Brand new chassis of SMMS[∞] realized compact chassis and light weight. By using benefits of this brand new chassis and technology, Installer can enjoy shortening work time by simplified piping work, reducing addition refrigerant amount and simplified test run setting. Therefore, Installer is able to get profit greatly from new SMMS[∞] design.

A BRAND NEW CHASSIS






Engineered in Japan, SMMS[∞] integrates all the latest technological innovations from Toshiba to achieve top class efficiency and ensure unrivalled comfort levels.



UNIQUE ON THE MARKET: TWIN ROTARY COMPRESSOR

The exclusive Toshiba twin rotary compressor brings outstanding performances to SMMS[∞] optimize system reliability.

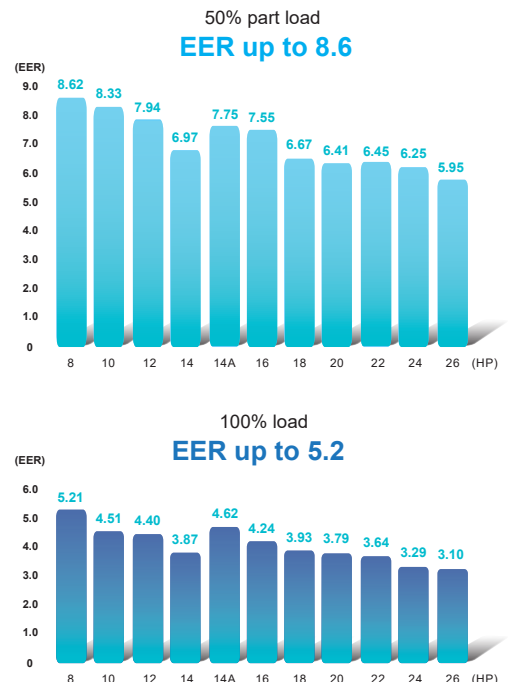


-  Large capacity
-  Wide operating range
-  Low required refrigerant
-  Low vibration
-  DLC treatment

TOP CLASS EFFICIENCY



Utilizing the new highly efficient core technologies results in greater energy efficiency and performance.



INFINITE FLEXIBILITY

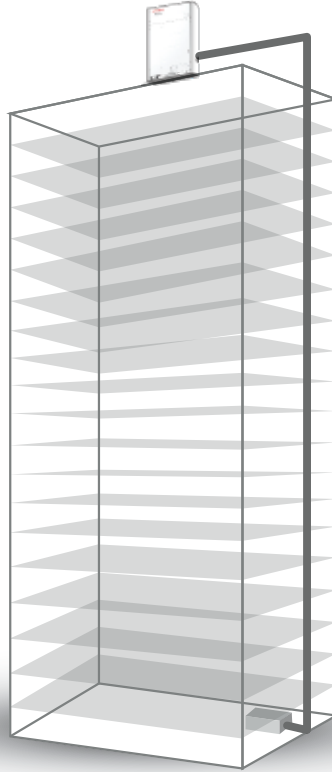
SMMS[∞] exceeds the limits of VRF for maximized project coverage. The product can be customized to offer combinations depending on requirements for efficiency, space and costs. SMMS[∞] is customised to help you ace.



4,000 combinations patterns
Free combination

1,200m max
Long piping length

110m max
High piping lift



Up to 128 indoor
Large FCU connection

Max 120HP by 5 units connection
Large system capacity

Max 200% combination
High diversity

FLEXIBLE FREE COMBINATION

Unit combination can be customised to meet the installation site requirement.

Combinations examples - SMMS[∞] 52HP
total 69 combinations

Total
4000
combination pattern is available



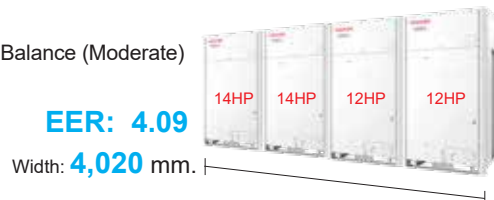
Standard (Space-saving)



Balance (Space-saving)



Balance (Moderate)



Max. Highest efficiency



Balance efficiency

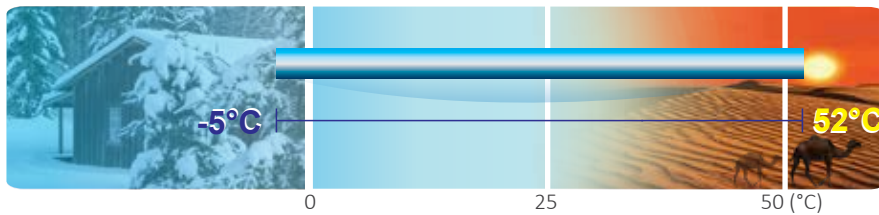


Note: Outdoor unit still should align from larger to smaller HP

COMFORT ABOVE ALL

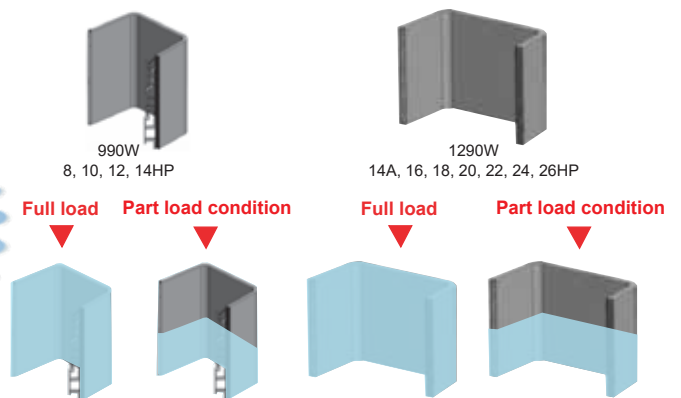
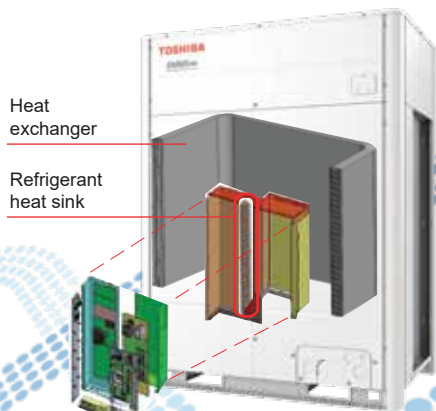
Providing end user high level of comfort is SMMS[∞] priority. In addition to a wide range of indoor units adapted to any kind of room configuration. Toshiba is offering one of the most accurate refrigerant flow management system.

WIDE OPERATING TEMPERATURE RANGE



The refrigerant heat sink can bring down temperature of electronic parts on inverter. By using this new function, SMMS[∞] can operate in high ambient condition such as 52°C.

SMMS[∞] can select optimal heat exchanger size based on operating mode, outdoor temp and capacity load. By using this function, SMMS[∞] can realize high efficiency not only full load operation but also part load operation.



STRONG ADAPTABILITY

SMMS[∞] integrates new features to adapt operations to local constraints with a constant target: the alliance of comfort and energy savings.



Heat exchanger usage area automatically varies depending on workload, maximizing energy savings and system reliability.

Split heat exchanger



Smart Grid ready with remote or dry contact demand control function.

Demand control



Automatic backup in case of combinations systems failure.

Auto backup function



Smart control to automatically equalize compressor operating hours.

Rotation drive



Inverter box is fully sealed up in order to avoid malfunction due to small animals.

Sealed up inverter box

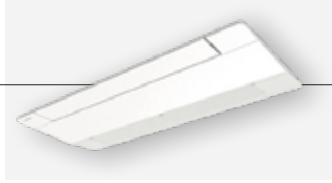


Automatic refrigerant charge to minimize installation workload.

Auto refrigerant charge

WIDEST INDOOR UNIT RANGE

NEW
indoor units



1-Way Cassette



Fresh Air Intake



Dx-coil interface advance

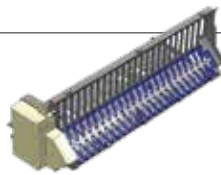


Zoning Airconditioning Unit

NEW
Air purifier solution



PM2.5 filter
4-Way Cassette



Air purifier kit
1-Way Cassette



Air purifier kit
4-Way Cassette



PM2.5 dust sensor
Indicator of air quality

- Blue : Air quality "Good"
- Green : Air quality "Moderate"
- Yellow : Air quality "Unhealthy"
- Red : Air quality "Very Unhealthy"

SMMS∞ Indoor units

Model	(HP)	0.8	1.0	1.25	1.7	2.0	2.5	3.0	3.2	4.0	5.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0	
	(kW)	2.2	2.8	3.6	4.5	5.6	7.1	8.0	9.0	11.2	14.0	16.0	22.4	28.0	34.0	40.0	45.0	50.4	56.0	
4-way Cassette High performance MMU-UP_1H-E		[Bar chart showing capacity range from 1.0 to 16.0 HP]																		
4-way Cassette MMU-UP_1HP-E		[Bar chart showing capacity range from 1.0 to 16.0 HP]																		
Compact 4-way Cassette MMU-UP_1MH-E		[Bar chart showing capacity range from 0.8 to 2.5 HP]																		
2-way Cassette MMU-UP_1WH-E		[Bar chart showing capacity range from 0.8 to 6.0 HP]																		
1-way Cassette MMU-UP_1YHP-E		[Bar chart showing capacity range from 0.8 to 4.0 HP]																		
Slim Duct MMD-UP_1SPHY-E		[Bar chart showing capacity range from 0.8 to 3.2 HP]																		
Concealed Duct MMD-UP_1BHP-E		[Bar chart showing capacity range from 0.8 to 6.0 HP]																		
Concealed Duct High Static Pressure MMD-UP_1HP-E(1)		[Bar chart showing capacity range from 2.0 to 12.0 HP]																		
Fresh Air Intake MMD-UP_1HFP-E(1)		[Bar chart showing capacity range from 4.0 to 18.0 HP]																		
Ceiling MMC-UP_1HP-E		[Bar chart showing capacity range from 1.7 to 6.0 HP]																		
High Wall MMK-UP_1HP-E		[Bar chart showing capacity range from 0.8 to 4.0 HP]																		
Zoning Airconditioning Unit MMZ-UP_1F/D		[Bar chart showing capacity range from 1.0 to 1.0 HP]																		
Floor Standing Concealed MML-UP_1BH-E		[Bar chart showing capacity range from 0.8 to 2.5 HP]																		
Floor Standing Cabinet MML-UP_1H-E		[Bar chart showing capacity range from 0.8 to 2.5 HP]																		
Console MML-UP_1NHP-E		[Bar chart showing capacity range from 0.8 to 2.5 HP]																		
Floor Standing MMF-UP_1H-E		[Bar chart showing capacity range from 1.7 to 6.0 HP]																		
Air -to- Air Heat exchanger with DX-coil*1 MMD-VN_2HEX1E(2)		[Bar chart showing capacity range from 1.7 to 2.0 HP]																		
Large Capacity Floor Standing*1 MMF-AP_5(D)HP-VA/VB		[Bar chart showing capacity range from 8.0 to 20.0 HP]																		
Dx-coil interface advance TCB-IFDMX01UP-E & RBM-A_1UPVA-E		[Bar chart showing capacity range from 8.0 to 20.0 HP]																		

● New chassis

*1: Because these models can support only old communication protocol, please communicate with local distributor if you want to connect these indoor units.

WIDE CONTROL LINEUP

Simplified, advanced, centralized, touch screen...
Toshiba is offering various choices of control solutions all compatible with the new TU2C LINK protocol. SMMS[∞] is also compatible with BACnet®, LonWorks® and Modbus® BMS languages

BMS-CT2560U-E
Max 256 indoor units connectable

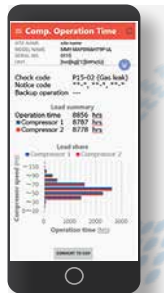


RBC-AMSU51-ES / EN RBC-AMTU31-E RBC-ASCU11-E
Max 16 indoor units connectable

EASY COMMISSIONING AND MAINTENANCE

Save time during commissioning and maintenance. Choose between the "Wave Tool Advance" using Smartphone NFC connection or the link adaptor connected to the outdoor or indoor unit.

NEW Application
Wave Tool Advance



Wireless connection using smartphone* NFC technology to collect system data



Get access to system data via indoor using link adaptor

Direct USB connection to get access to system data

System operation self record using link adaptor

TOSHIBA SELECTION TOOL



Designed for novice and expert users, Toshiba selection software creates simple, yet detailed VRF system schematics. It is highly versatile, allowing the level of detail to be tailored to suit customer requirements. Final detailed reports can be produced and sent to customers in PDF format or in more complex files, such as AutoCAD DXF, allowing simple integration into existing software packages.

SMMS[∞] Performances

Outdoor unit	MMY-	MUP0801T8P	MUP1001T8P	MUP1201T8P	MUP1401T8P	MUP14A1T8P	MUP1601T8P	MUP1801T8P	MUP2001T8P	MUP2201T8P	MUP2401T8P	MUP2601T8P
Outdoor unit (Anti-Corrosion)	MMY-	MUP0801T8JP	MUP1001T8JP	MUP1201T8JP	MUP1401T8JP	MUP14A1T8JP	MUP1601T8JP	MUP1801T8JP	MUP2001T8JP	MUP2201T8JP	MUP2401T8JP	MUP2601T8JP
		8 HP	10 HP	12 HP	14 HP	14 HP	16 HP	18 HP	20 HP	22 HP	24 HP	26 HP
Cooling capacity	kW	22.4	28.0	33.5	40.0	40.0	45.0	50.4	56.0	61.5	67.0	73.0
Power input	kW	4.30	6.21	7.61	10.34	8.66	10.61	12.82	14.78	16.90	20.36	23.55
EER	kW/kW	5.21	4.51	4.40	3.87	4.62	4.24	3.93	3.79	3.64	3.29	3.10
Running current	A	6.90	9.74	11.8	15.9	13.6	16.5	19.7	22.7	26.0	31.3	36.2
Maximum overcurrent protection	A	20	25	25	32	40	50	50	50	63	63	63

SMMS[∞] Physical data

Outdoor unit	MMY-	MUP0801T8P	MUP1001T8P	MUP1201T8P	MUP1401T8P	MUP14A1T8P	MUP1601T8P	MUP1801T8P	MUP2001T8P	MUP2201T8P	MUP2401T8P	MUP2601T8P
Outdoor unit (Anti-Corrosion)	MMY-	MUP0801T8JP	MUP1001T8JP	MUP1201T8JP	MUP1401T8JP	MUP14A1T8JP	MUP1601T8JP	MUP1801T8JP	MUP2001T8JP	MUP2201T8JP	MUP2401T8JP	MUP2601T8JP
Air flow	m ³ /h	9900	10500	11700	11880	13750	14300	14300	15200	16500	16500	18200
Sound power level	dB(A)	76.0	77.0	79.0	82.0	80.0	82.0	82.0	83.0	86.0	86.0	88.0
Sound pressure level	dB(A)	53.0	55.0	58.0	58.0	59.0	60.0	61.0	61.0	63.0	63.0	66.0
Number of fan	unit	1	1	1	1	1	1	1	1	2	2	2
External static pressure available	Pa	80	80	80	80	80	80	80	50	80	80	80
Dimensions (h x w x d)	mm	1690 x 990 x 780	1690 x 990 x 780	1690 x 990 x 780	1690 x 990 x 780	1690 x 1290 x 780	1690 x 1290 x 780	1690 x 1290 x 780	1690 x 1290 x 780	1690 x 1290 x 780	1690 x 1290 x 780	1690 x 1290 x 780
Weight	kg	223	223	223	223	294	294	294	294	329	329	329
Compressor type		Hermetic Twin Rotary	Hermetic Twin Rotary	Hermetic Twin Rotary	Hermetic Twin Rotary	Hermetic Twin Rotary	Hermetic Twin Rotary	Hermetic Twin Rotary	Hermetic Twin Rotary	Hermetic Twin Rotary	Hermetic Twin Rotary	Hermetic Twin Rotary
Refrigerant charge R410A	kg	6.0	6.0	6.0	6.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Gas line type - diameter	m	Brazing - 19.1	Brazing - 22.2	Brazing - 28.6	Brazing - 28.6	Brazing - 28.6	Brazing - 28.6	Brazing - 28.6	Brazing - 28.6	Brazing - 28.6	Brazing - 34.9	Brazing - 34.9
Liquid line type - diameter	m	Brazing - 12.7	Brazing - 12.7	Brazing - 12.7	Brazing - 15.9	Brazing - 15.9	Brazing - 15.9	Brazing - 15.9	Brazing - 15.9	Brazing - 19.1	Brazing - 19.1	Brazing - 19.1
Farthest piping equivalent length	m	210	210	210	210	210	210	210	210	210	210	210
Farthest piping real length	m	190	190	190	190	190	190	190	190	190	190	190
Maximum total piping length	m	500	500	500	500	500	500	500	500	500	500	500
Maximum lift (indoor unit above/below)	m	40 / 110**	40 / 110**	40 / 110**	40 / 110**	40 / 110**	40 / 110**	40 / 110**	40 / 110**	40 / 110**	40 / 110**	40 / 110**
Operating range - DB	°C	-5/52	-5/52	-5/52	-5/52	-5/52	-5/52	-5/52	-5/52	-5/52	-5/52	-5/52
Power supply	V-ph-Hz	400(380/415)-3-50	400(380/415)-3-50	400(380/415)-3-50	400(380/415)-3-50	400(380/415)-3-50	400(380/415)-3-50	400(380/415)-3-50	400(380/415)-3-50	400(380/415)-3-50	400(380/415)-3-50	400(380/415)-3-50

*1 : Be sure to refer to the Engineering Databook for details of these conditions and requirements.
Rated conditions : Cooling: Indoor 27 °C Dry Bulb / 19 °C Wet Bulb, Outdoor 35 °C Dry Bulb.
Base on equivalent piping length of 7.5m and piping height difference of 0m.

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